



**Federal Aviation  
Administration**

Financial Management

Recruiting and Hiring

NextGen

Career Portal  
Employee

Competency

Acquisition of Personnel Assets

Test and Evaluation

Engineering and Research

Development

Destination FAA

\$5 billion

Programs and Project Managers

FAA Policy

Community of Practice

Acquisition Certification Program

Certification

# ACQUISITION WORKFORCE STRATEGY

**2015**

# TABLE OF CONTENTS

<b>TABLE OF CONTENTS</b>	<b>1</b>
<b>EXECUTIVE SUMMARY</b>	<b>2</b>
<b>1. FAA'S ACQUISITION MANAGEMENT SYSTEM (AMS)</b>	<b>6</b>
<b>2. TODAY'S ACQUISITION WORKFORCE</b>	<b>8</b>
<b>3. CURRENT SITUATION: BUSINESS DRIVERS AND CHALLENGES</b>	<b>15</b>
<b>4. ACQUISITION WORKFORCE PLANNING PROCESS</b>	<b>19</b>
<b>5. ACQUISITION WORKFORCE STRATEGIES</b>	<b>27</b>
<b>6. FUTURE WORKFORCE REQUIREMENTS</b>	<b>35</b>
<b>7. FAA ACQUISITION PROFESSION PROFILES</b>	<b>40</b>
<b>APPENDIX</b>	<b>95</b>

# EXECUTIVE SUMMARY

This Acquisition Workforce Strategy<sup>1</sup> provides the blueprint for building and sustaining a high-performing acquisition workforce. The purpose and focus of the Acquisition Workforce Strategy is to ensure FAA has a stable cadre of federal employees and maintains core in-house capabilities necessary to successfully manage FAA's acquisition objectives. While recognizing the contribution and role of our contractors, this Strategy focuses on the federal workforce only.

The approximately 1,830 acquisition professionals are instrumental in acquiring the FAA technologies, services and systems that enable the nation to continue to benefit from safe, efficient air travel and a healthy aviation industry. While the acquisition workforce represents only 4 percent of the approximately 44,000 FAA employees, these professionals manage acquisition programs with total life cycle investment in the tens of billions of dollars. The critical role of these professionals in securing an improved National Airspace System (NAS) for the best value makes their development, hiring and retention of paramount importance, all of which are increasingly challenging.

The workload staffing estimates provided in this Strategy show that the current acquisition workforce is understaffed by approximately 4 percent, or 70 professionals, to meet the agency's acquisition workload requirements. The shortages include the critical acquisition program manager and contracting professions. The need for additional acquisition professionals is projected to continue to grow through 2020, when a workforce of approximately 2,000 professionals, an increase of almost 9 percent over today's workforce, will be needed to meet FAA's acquisition requirements. Section 6 of this Strategy provides additional information about the projected workforce requirements through FY 2020.

Adding to this growth challenge, FAA's acquisition workforce is largely comprised of experienced, senior employees; almost half of the workforce has 20 years of experience and 65 percent are in senior career levels. Correspondingly, 22 percent of FAA's acquisition workforce members are eligible to retire this year, and 46 percent will be eligible within 5 years. Attrition analysis from prior years shows that not all employees will take retirement when they become eligible, but almost 25 percent of the current workforce, or over 450 professionals, are likely to leave the agency by 2020. Sections 2 and 7 provide additional information about the profile of today's acquisition workforce.

Maintaining an adequately sized workforce is not the only challenge; equally if not more challenging is building, maintaining and retaining a workforce with the appropriate acquisition skills and experience. Acquisition professionals must stay abreast of rapidly evolving

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<sup>1</sup> The name of this document was changed this year to "Acquisition Workforce Strategy" from "Acquisition Workforce Plan" to avoid confusing it with Congressionally mandated workforce staffing plans, like the Controller Staffing Plan.

developments across many professions, introduce and leverage new and emerging technologies, and expertly manage multi-year development cycles; all to ensure that billions of taxpayers' dollars are used wisely. To do this requires advanced technical and leadership skill sets. It can take years to develop professionals with both the understanding of FAA's complex, large-scale air traffic systems and the experience to work with the many and varied stakeholders involved throughout the acquisition process, including airlines, local and state governments, sophisticated suppliers, and the U.S. Congress. Section 3 of this Strategy explains the primary business drivers and challenges facing the overall acquisition workforce, and Section 5 describes the strategies FAA has put in place to address these acquisition-wide challenges. Section 7 describes the specific challenges facing each individual acquisition profession, and the steps taken and planned to address them.

Maintaining a stable community of skilled, experienced federal acquisition employees takes resources, and, like most federal agencies, FAA is operating in a challenging fiscal environment, the impact of which could continue well into the future. Current and anticipated budget constraints could continue to limit FAA's ability to replace employees who retire, much less hire additional employees to meet projected workload increases. Recognizing those constraints, this Strategy places primary emphasis on the strategies required to develop the existing workforce to most effectively and efficiently manage acquisitions related to FAA's modernization objectives. Section 5 describes specific strategies for maintaining and developing the acquisition workforce.

FAA made considerable progress in the development of its acquisition workforce in 2015. Since publication of the 2014 Acquisition Workforce Plan (now Strategy), the agency has:

- Developed career planning tools tailored to individual acquisition professions. These tools have been disseminated to acquisition workforce managers and employees, and include:
  - Career Planning, Development and Resource Guides
  - Competency Experience Checklists
  - Development Activities Guides
- Created hiring tools tailored to individual acquisition professions, including:
  - Vacancy Announcements
  - Competency-Based Interview Questions
- Met its FY 2015 goals of:
  - Certifying at least 87 percent of Contracting Officers/Specialists.
  - Ensuring that at least 90 percent of Contracting Officers/Specialists are up to date in meeting recertification requirements.
  - Ensuring that at least 90 percent of program managers on FAA's largest and most complex projects have attained or maintained certification requirements in

- accordance with FAA policy.
  - Ensuring that at least 90 percent of new Real Estate Contracting Officers/Specialists receive basic real estate training.
  - Increasing by 5 percent, from the FY 2014 baseline, the number of FAA Contracting Officer's Representatives that attain certification.
- Developed and applied an approach for validating the acquisition workforce staffing projections presented in this Strategy and used to support workforce budgeting, allocation and staffing decisions.
- Expanded the workforce to include more than 60 information technology Program / Project Managers who develop and manage FAA's administrative and mission support systems.
- Enhanced certification program requirements to meet evolving workforce needs and to align with Federal Acquisition Institute (FAI) program changes.
- Developed or updated key acquisition training courses, including:
  - *Maintain It – Your FAA Purchase Card*, an online refresher training housed in FAA's electronic Learning Management System (eLMS). This course is required training for all FAA purchase cardholders (5,000 plus) and approving officials (2,000 plus) taken every 2 years.
  - *NAS Enterprise Architecture (EA) Awareness*, an online overview course for FAA system engineers, IT analysts, program managers, financial managers and any other staff who need to better understand how FAA's Enterprise Architecture supports business operations and provides benefit to the NAS.
  - *Test and Evaluation Awareness and Practices Overview*, an online overview course for anyone involved with the NAS who needs to better understand the processes and practices involved in test and evaluation of FAA programs.
  - *Introduction to Acquisition Management System (AMS) Procurement*, an instructor-led course, was updated to reflect recent changes in FAA policies and guidance.
- Certified over 400 Contracting Officer's Representatives (CORs) supporting all contracts, for a total of over 1,900 certified CORs.
- Provided over 200 acquisition-related training events on more than 35 courses for over 6,200 students.
- Provided regular reporting on acquisition workforce metrics to the Acquisition Workforce Council to support resource decision-making across FAA's acquisition organizations.

This Strategy recognizes the progress FAA has made to sustain its acquisition workforce. It also describes the actions FAA intends to take in FY 2016 to continue developing this vital workforce. Key activities for FY 2016 will include:

- Refining acquisition workforce staffing projection models with the support of the Office of Labor Analysis in order to improve and supplement the future-year staffing requirements currently provided by FAA's subject matter experts.
- Identifying the need for profession-specific staffing models, where necessary, to better inform future workforce staffing projections.
- Publishing a core acquisition development curriculum that builds the foundational skills for all acquisition workforce members, beyond just those professionals with mandatory certification requirements.
- Developing and publishing an acquisition leadership development guide to support building key leadership competencies across all acquisition workforce professions.

FAA embraces acquisition workforce development because the agency recognizes the need to have the highest caliber acquisition professionals to fulfill its mission. The expertise and performance of the acquisition workforce has a direct impact on the safety of air transportation and, ultimately, U.S. economic growth.

# 1. FAA's ACQUISITION MANAGEMENT SYSTEM (AMS)

**T**he Acquisition Management System (AMS) establishes policy and guidance for all aspects of lifecycle acquisition management at FAA. Acquisition professionals rely on the AMS every day as they conceptualize, plan, execute and oversee the development and implementation of the FAA's mission systems, services and technologies. It is important that FAA acquisition professionals understand and apply the AMS and its unique capabilities and flexibilities.

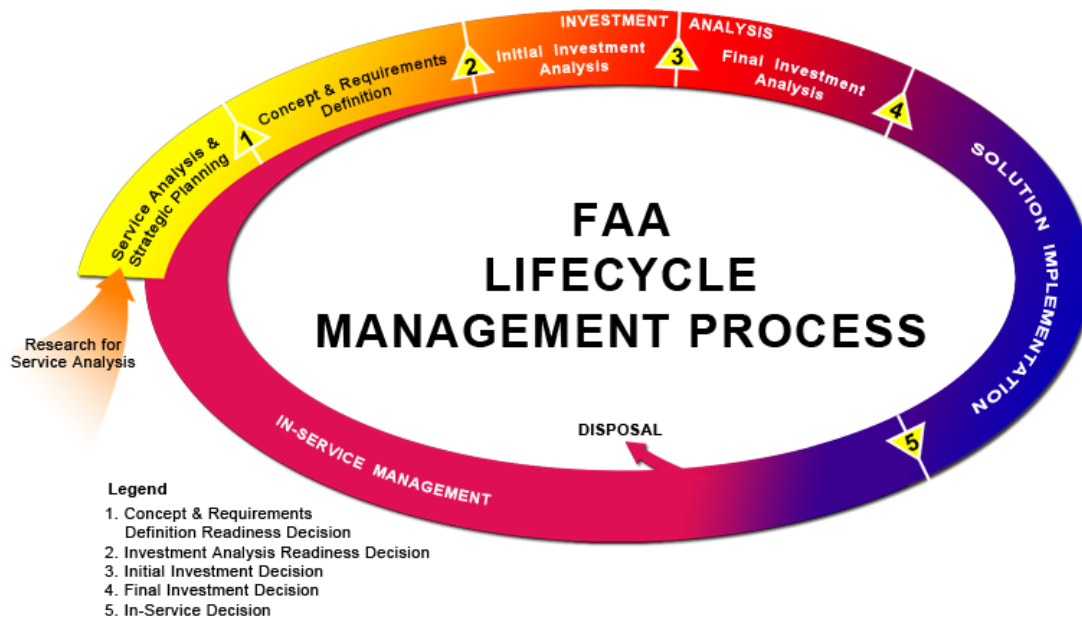
The AMS defines how FAA manages its resources – money, people and assets - to fulfill its mission. The objectives of the policy are to increase the quality, reduce the time, manage the risk and minimize the cost of delivering safe and secure services to the aviation community and flying public. Acquisition management policy promotes these objectives through partnership among service providers and customers to ensure FAA plans, programs and budgets address priority aviation needs.

The FAA developed the Acquisition Management System in response to Section 348 of Public Law 104-50. The AMS supersedes the Major Acquisition Policies and Procedures of the Department of Transportation and all other acquisition and procurement statutes and regulations, including the Federal Acquisition Regulation (FAR). Contracts awarded prior to April 1, 1996 remain under the FAR until bilateral modification brings them under the AMS. AMS policy takes precedence over all other FAA policy dealing with any aspect of lifecycle acquisition management and related disciplines. The AMS serves as FAA's Capital Planning and Investment Control process.

FAA's Senior Investment Review Board, the Joint Resources Council (JRC), oversees the FAA investment portfolio as expressed in FAA's enterprise architecture, budget and individual service portfolios. The JRC evaluates the performance of investment programs and operational assets within each service against quantified baseline measures. Planned initiatives for new investment are discussed along with proposals to remove, replace or improve operational assets with declining performance that no longer satisfy a service need or are nearing the end of their service life. The JRC aligns and coordinates investment activity across the lines of business through annual review and approval of the enterprise architecture and agency budget submissions to Congress.

The FAA executes its acquisition management policy by means of the lifecycle management process, which is organized into a series of phases and decision points, as shown in Exhibit 1.1. The circular representation conveys the principles of seamless management and continuous improvement in service delivery over time. Application is flexible and may be tailored appropriately. A continuing dialog with and feedback from customers (e.g., commercial air

carriers, general aviation, air transport industry, state and local airport authorities) and users (air traffic and technical operations) is maintained throughout the process.



## Exhibit 1.1

### FAA Acquisition Management Lifecycle

In 2015 the FAA launched the AMS 2016 initiative to review and update AMS policy consistent with today's acquisition needs and practices. Changes resulting from AMS 2016 will be implemented in fiscal year 2016.

The FAA Acquisition System Toolset (FAST) is the official record of AMS. As a 'toolset,' FAST contains AMS Policy (agency-wide, mandatory requirements) and AMS Guidance (information implementing or augmenting policy). FAST can be found on the FAA website at

[http://fast.faa.gov/Index.cfm?p\\_title=Fast Home](http://fast.faa.gov/Index.cfm?p_title=Fast+Home).



## 2. TODAY'S ACQUISITION WORKFORCE

**A**cquisition professionals govern and manage the development, refresh and modernization of the FAA's mission systems, services and technologies. For the purposes of this Strategy, FAA's core acquisition workforce consists of:

- Employees in acquisition professions who directly and primarily support one or more Capital Investment Plan<sup>2</sup> (CIP) programs, from FAA's Acquisition Management System's Service Analysis & Strategic Planning phase through the Solution Implementation phase. This includes Service Life Extension Programs (SLEP).
- Program and Project Managers who develop and manage FAA's Information Technology (IT) administrative and mission support systems.
- Contracting Officers/Specialists, Real Estate Contracting Officers/Specialists and Acquisition Attorneys for all procurements.

The acquisition workforce is comprised of federal employees working in 11 professions, including:

**Leadership.** Leadership professionals are the executives and senior managers providing overall direction and leadership for all acquisition programs and for acquisition governance.

**Program / Project Managers.** These professionals oversee the development and implementation of modernization efforts on Capital Improvement Plan programs and administrative and mission support systems, ensuring that the capabilities are delivered on time, on budget and to specification.

**Researchers and Engineers / Systems Engineers.** These technical professionals manage engineering integration across the NAS, individual systems and acquisition programs to achieve a consistent and consolidated NAS design. Program engineers oversee the technical development of acquisition programs.

**Financial Analysts.** These analysts develop cost projections, recommend steps to mitigate financial risks and provide financial and investment analysis.

**Contracting Officers/Specialists.** These contracting professionals manage all processes and procedures involved in establishing and maintaining contractual relationships between FAA and its external suppliers.

**Realty Specialists.** Real Estate Contracting Officers/Specialists (RECO/S) are responsible for acquiring real estate, utilities and land.

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<sup>2</sup> The FAA Capital Investment Plan (CIP) is a five-year plan that describes the National Airspace System (NAS) modernization projects and lists the activities the FAA intends to accomplish during that period. The CIP contains both projects that modernize existing systems and projects that begin the transformation to NextGen.

**Contracting Officer's Representatives (CORs).** CORs help resolve technical issues, give technical direction to the Contractor and interpret technical processes and procedures for the Contracting Officer. COR responsibilities are often an additional duty.

**Integrated Logistics Support Specialists.** Logisticians plan, establish and maintain an integrated logistics system to ensure that programs have access to parts and support services throughout their life cycle.

**Test and Evaluation Specialists.** Test and Evaluation specialists verify and validate that products meet specifications, satisfy requirements and are operationally suitable and effective.

**Acquisition Attorneys.** Acquisition attorneys provide legal advice regarding all aspects of contract formation and administration, and review FAA acquisition actions for legal sufficiency.

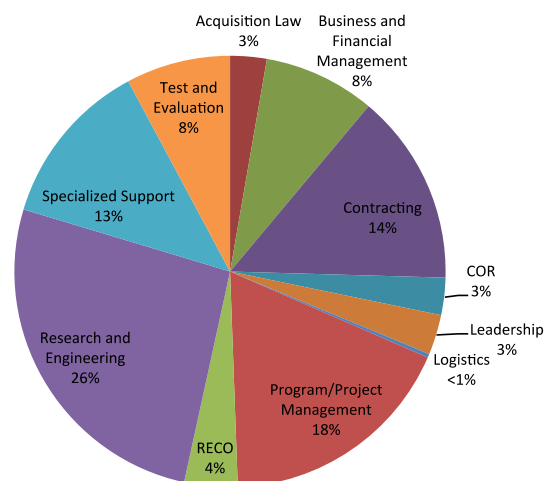
**Specialized Support.** Professionals in the specialized support category are typically NAS subject matter experts. They can include safety engineers, information systems specialists, air traffic specialists and training experts.

Profiles of each profession are provided in Section 7 of this Strategy.

## OVERVIEW OF THE CURRENT WORKFORCE

The core acquisition workforce consists of approximately 1,830 federal employees. As explained in Sections 1 and 3 of this Strategy, the workforce provides acquisition support activities for NAS and major systems acquisition programs through 11 distinct professions:

- Leadership
- Program / Project Management
- Research and Engineering / Systems Engineering
- Business - Financial Management
- Contracting
- Realty Specialist
- Contracting Officer's Representative (COR)
- Integrated Logistics Support
- Test and Evaluation
- Acquisition Law
- Specialized Support



**Exhibit 2.1**

FAA Acquisition Workforce by Profession

While distinct in the roles that they play, these professions work closely together. Exhibit 2.1 provides a breakout of the acquisition workforce in each of the 11 professions. The data in the

following exhibits was provided in the May reporting period (validated as of May 2015 FPPS).

At 26 percent, the Research and Engineering profession represents the largest percentage of federal employees in the acquisition workforce. Combined, Research and Engineering, Contracting, and Program / Project Management make up almost 60 percent of the acquisition workforce, providing critical skills and capabilities required to procure, implement and manage the resources and technologies essential to FAA's acquisition programs.

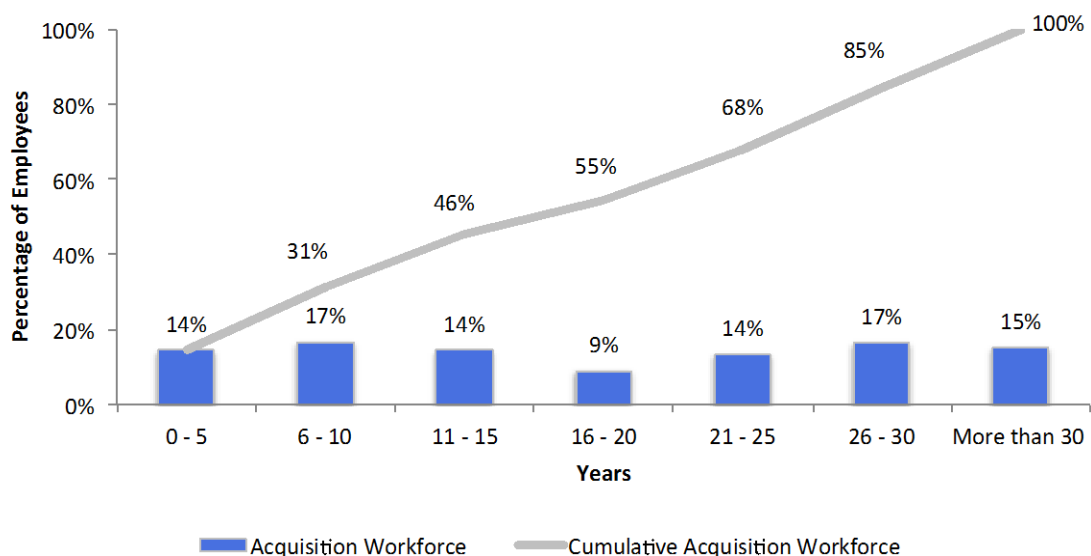
It is important to note that the engineers, Program / Project Managers, and CORs represented in the exhibit are only those that support FAA's Capital Investment Plan (CIP) programs and its administrative and mission support systems. There are also other CORs, for example, who support procurements other than these core acquisition programs and systems, such as facilities support contracts. While not included in this document, FAA does track and ensure training is completed and that certification requirements are met by the full COR community. Similarly, the Logistics population includes only those Integrated Logistics Support Specialists who support NAS programs during acquisition; there are many logistics specialists who provide logistics support to in-service (non-CIP) programs and who are therefore not included in this Strategy.

## YEARS OF EXPERIENCE

Exhibit 2.2 shows the distribution of years of federal service for all professionals in the acquisition workforce. The average FAA acquisition professional has 19 years of federal service. 45 percent of the acquisition workforce has over 20 years of experience; 14 percent of the workforce has 5 or fewer years of federal service.

### Exhibit 2.2

Acquisition Workforce Federal Service

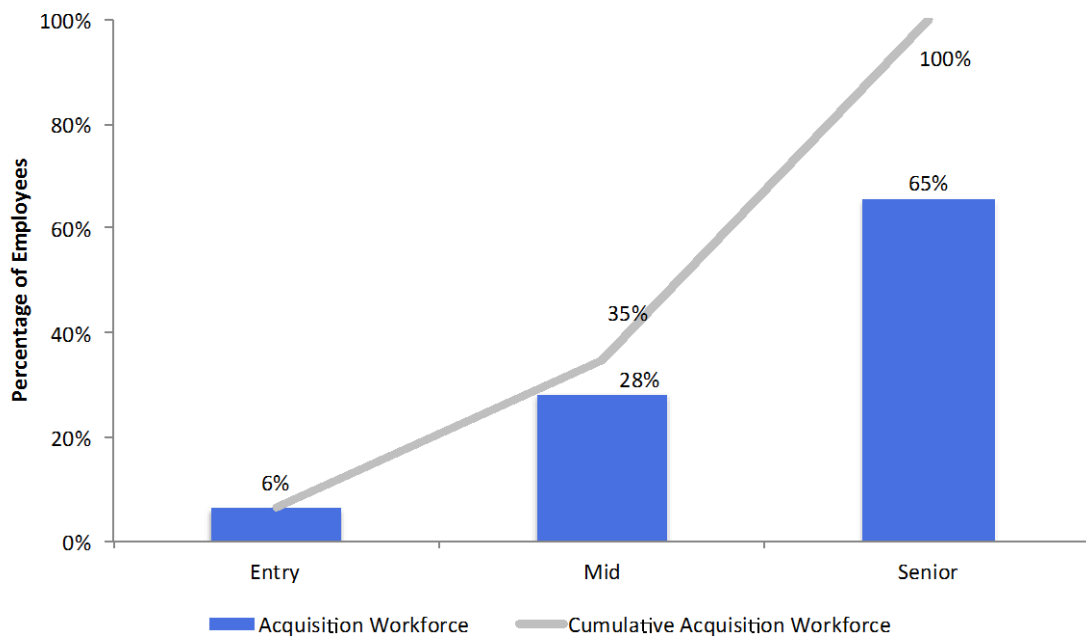


## Acquisition Career Levels<sup>3</sup>

Consistent with an experienced workforce, the exhibit below shows that 65 percent of acquisition professionals are in the senior career level. With 35 percent of the workforce below the senior level, there is some room for employees to develop and grow into increasingly complex and demanding acquisition management positions.

### Exhibit 2.3

Acquisition Workforce Career Levels



## RETIREMENT ELIGIBILITY

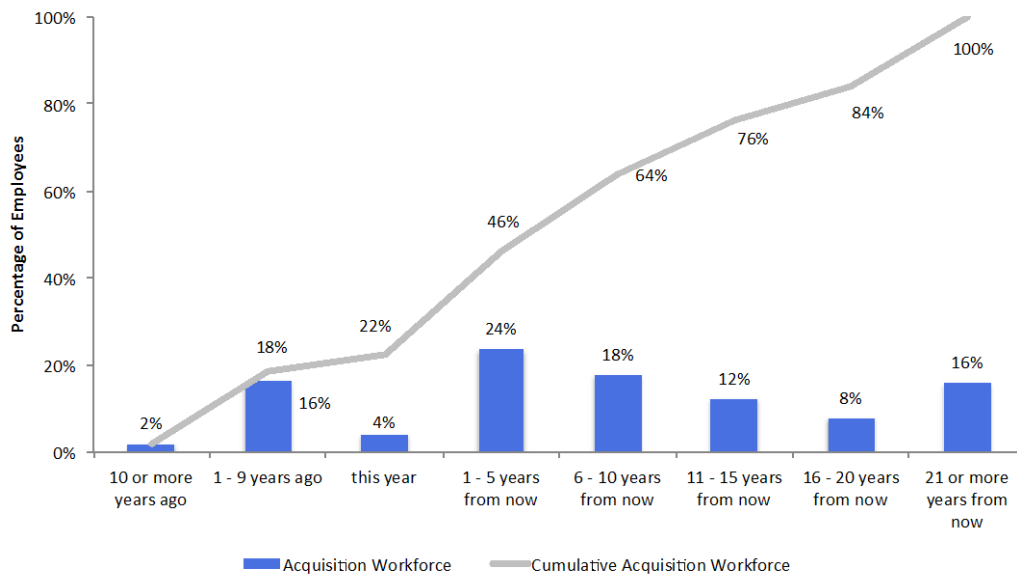
Twenty-two percent of the acquisition workforce, approximately 400 professionals, are eligible for retirement this calendar year, and 46 percent will be eligible within the next 5 years (Exhibit 2.4).

Eighteen percent of the overall acquisition workforce, approximately 330 professionals, have been eligible to retire for 1 or more years. These retirement-eligible professionals are spread across all of the professions.

<sup>3</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

## Exhibit 2.4

### Acquisition Workforce Retirement Eligibility



Anticipated retirements are a concern across federal civilian government, not just for FAA's acquisition workforce. According to the General Accountability Office (GAO), by September 2017 nearly 600,000 (31 percent) of on board staff will be eligible to retire.<sup>4</sup> Consistent with this trend, 29 percent of FAA's acquisition workforce will be eligible to retire at that time.

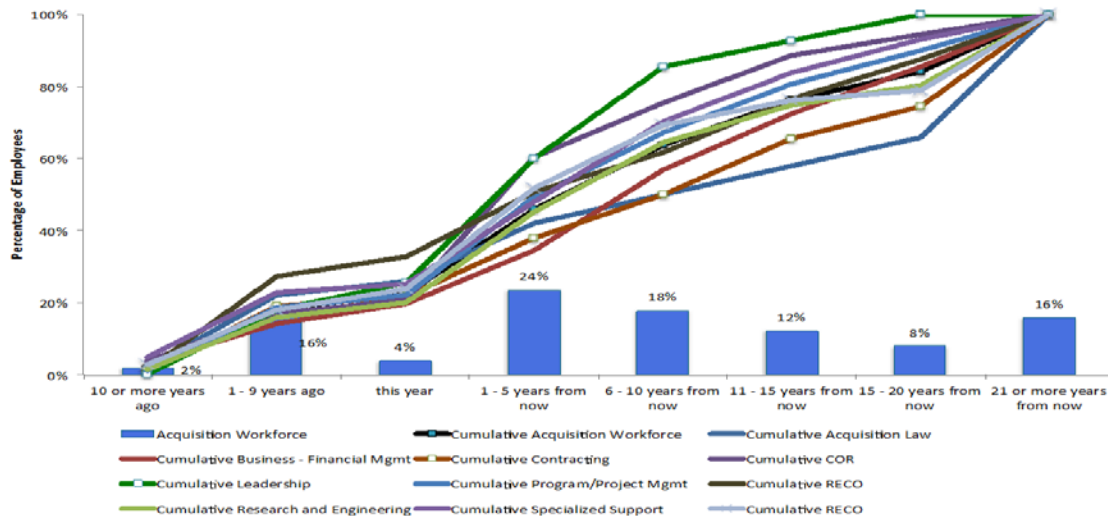
Not all employees take retirement at the time they become eligible but retirement eligibility data is useful for understanding the potential future losses related to retirements as the acquisition workforce ages. The following page contains an attrition forecast that uses historical retirement and non-retirement rates to help project actual employee losses through 2020.

Exhibit 2.5 shows the retirement eligibility profile for all acquisition professions. Profiles by individual profession are provided in Section 7, *FAA Acquisition Profession Profiles*.

<sup>4</sup> "Federal Workforce: Recent Trends in Federal Civilian Employment and Compensation", General Accountability Office, January 2014, GAO-14-215.

## Exhibit 2.5

### Acquisition Workforce Retirement Eligibility by Profession



## ATTRITION FORECAST

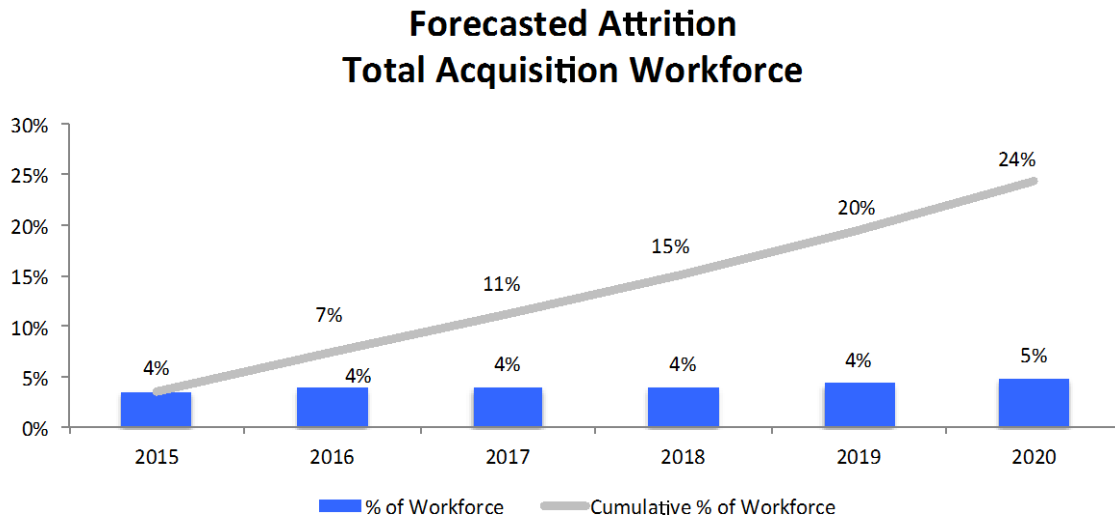
The attrition forecast shown in Exhibit 2.6 considers retirement eligibility, past retirement rates and past non-retirement rates (e.g. resignations, removals and deaths) to project the percent of the workforce that can be expected to leave the agency through 2020. The attrition forecast is expected to trend upward over the next five years, as employees get deeper into retirement eligibility. By 2020, FAA forecasts, based on historical data, that almost 25 percent of the current workforce are likely to leave the agency.

Attrition for FAA overall was 6.8 percent<sup>5</sup> in 2013, which is higher than the projected annual attrition of approximately 4 percent for the overall acquisition workforce. Attrition for the Contracting profession, a mission critical profession at FAA, was 10 percent in 2013.

<sup>5</sup> "FAA Human Capital Strategic Plan: 2014 – 2018".

## Exhibit 2.6

### Acquisition Workforce Attrition Forecast



### 3. CURRENT SITUATION: BUSINESS DRIVERS AND CHALLENGES

#### MODERNIZING AGING SYSTEMS

For over 50 years, the FAA has delivered the world's leading aviation system, setting an unparalleled standard for safety and efficiency that is emulated globally. Commercial aviation fatality rates are at historic lows, and other safety indicators, such as runway incursions, incidents or accidents, are also headed in the right direction. While safely moving flights is FAA's number one priority, dealing with congestion and delays and improving efficiency and cost performance are also important considerations for managing the National Airspace System (NAS). Flight delays continue to impact passenger travel and future demand forecasts remain high. Though staffed by a capable, dedicated workforce, the current air traffic control system is not scalable or flexible enough to keep up with the anticipated future demand. NextGen is FAA's technological response to this serious current and future challenge.

Today's radar-based system of air traffic control, which has served the United States so well for the last 60 years, has hit the ceiling of its growth capacity. Without continued implementation of systems modernization efforts, such as FAA's NextGen, the nation faces air traffic gridlock that will not only adversely affect the flying experience but will also impact gross domestic product.

FAA's acquisition professionals are working to modernize the NAS to increase flight capacity, meet future air traffic demands and enable the nation to continue to benefit from safe, efficient air flight and a healthy aviation industry. To add to the complexity, these acquisition professionals must also sustain current NAS systems and facilities to ensure continuity of operations as new systems are developed, provide viable backup options as new systems are deployed, and maintain the quality and functionality of the facilities that host those systems. Balancing the requirements of both modernization and sustainment is a difficult job that requires knowledge and experience in both evolving and proven technologies.

#### Why NextGen Matters

- More predictable travel with fewer delays
- Less impact on the environment
- Improved access to data, keeping airline employees and passengers better informed
- Better use of airports in taxpayers' communities
- Better accommodation of the country's future air travel needs
- Improved security and the highest levels of safety



## COMPLEX ACQUISITIONS

The FAA faces unprecedented acquisition challenges to implement the NextGen portfolio of solutions. Today, FAA's acquisitions are more complex than ever and require new approaches and skills to integrate new capabilities into a system that must always be online and available for operational use. The FAA must ensure that the systems it delivers provide the reliability and capabilities needed in the NAS.

The overarching business challenges affecting the acquisition community include:

- **Rapid Change.** Technology changes rapidly. In particular, the evolution of the NAS requires new and more integrated technology that will be refreshed more frequently than the legacy systems of the past. Today's integrated technologies and end-to-end solutions demand collaboration across projects and lines of business.
- **Number of Acquisitions.** FAA manages more than 150 acquisition programs identified in the Capital Investment Plan (CIP). Many of these programs are further organized into separate and distinct projects. The large number of current, on-going acquisitions requires a multi-disciplined workforce with deep skills.
- **Increased Complexity and Interdependence of Programs.** Programs are becoming more complex and interdependent. Today's acquisition programs require enhancements to multiple components of the NAS that are being developed in parallel by different program offices. The globalization of the aviation industry, including an increasing focus on international standards, adds another dimension of complexity. Integrated, complex solutions require knowledge of the entire system, close collaboration, a coordinated approach to problem solving and constant communications.
- **Delivering Best Value.** Public programs must demonstrate the value and outcomes of their work and link those outcomes to business and funding decisions. The FAA must make decisions based on a full understanding the cost of providing benefits to the taxpayer and flying public.
- **Portfolio Management.** The ability to manage a portfolio of investments to achieve mission effectiveness is critical. The FAA's Enterprise Architecture portrays the "as is" and "to be" state of FAA operational assets, along with roadmaps that lay out, over time, what investments will be made to achieve the end state configuration. The complex "system of systems" concepts and integration of new technologies is increasing the focus and requirements for portfolio management.
- **Investment Analysis.** A large influx of investment analysis efforts over the next five years will increase the need for business case and investment analysis expertise to determine the life cycle costs and economic benefits of interdependent programs and projects.

## BUDGET UNCERTAINTIES

FAA's workforce requirements are based on current and projected workload, consistent with the development of future year budget requests. They are reflective of program plans generated to meet FAA's commitments for future systems capabilities. Actual enacted annual funding levels can result in changes in the actual size of the workforce compared to the projected workforce for the impacted years. When the federal budget outlook is unclear, it makes it particularly difficult to estimate which program requirements will be implemented, and, ultimately, what workforce will be available to support implementation.

## SCARCITY OF SKILLED ACQUISITION PROFESSIONALS

Hiring and developing acquisition professionals at FAA and across the federal government have not kept pace with the growth in the number and complexity of acquisitions. A combination of factors, including the increasing complexity of acquisition work and retirements, are creating competition for acquisition talent across government. The Federal Acquisition Institute (FAI) and the Government Accountability Office (GAO) have both reported on the shrinking pool of certified and experienced acquisition professionals.

Because most federal agencies face these same issues, FAA experiences stiff competition in the talent market as each agency struggles – and literally competes with one another – to maintain the skills and resources necessary to manage the taxpayers' investment. To address this situation, FAA continues to seek qualified acquisition candidates and is maintaining a concerted focus on retaining and developing its existing talent. Finding qualified professionals – with the right skills and right experience – is proving to be increasingly difficult. This limitation leads to hiring less experienced staff who need time to develop their acquisition skills and higher workload for current employees.

## RETIREMENTS AND ATTRITION

FAA's acquisition professionals are highly seasoned, with many years of federal and FAA-specific experience. Collectively, their knowledge represents a valuable and critical asset to the agency in the highly complex, technical domain of the NAS. While technical and leadership skills can be developed over time through training and other developmental programs, acquisition professionals need hands-on experience with the NAS to fully understand how different technologies, systems and hardware sub-systems intersect and integrate. Additionally, FAA acquires system solutions under its unique acquisition system, the Acquisition Management System (AMS). Losing professionals skilled in the NAS and the AMS, with the probable loss of almost 25 percent of the current workforce by 2020, could significantly impact FAA's ability to acquire critical NextGen systems in the most effective and efficient manner.

The FAA is experiencing attrition across all acquisition workforce professions due to retirements

and the loss of experienced employees to other federal agencies. Losing highly skilled and experienced professionals results in fewer highly qualified staff managing increasingly complex acquisitions, erodes morale and puts the agency at risk for increased costs, disruptions and delays. In addition to the immediate impacts of losing senior, experienced professionals, a thinning pipeline of talent can have long-term impacts on knowledge transfer and, ultimately, acquisition program performance. With increasing attrition, FAA must implement strategies to retain existing staff and work to build our pipeline and bring new employees into the agency.

Section 5, Acquisition Workforce Strategies, describes the strategies FAA has put in place to address these critical business drivers and challenges and the key accomplishments to-date.

## 4. ACQUISITION WORKFORCE PLANNING PROCESS

**F**AA's Acquisition Workforce Council is comprised of acquisition executives from across the agency. The Council sets acquisition workforce-related strategies and oversees plan development and implementation. The Director of Acquisition Policy and Oversight chairs the Council. This position reports directly to the FAA Acquisition Executive.

The Council periodically reviews and refines long-term planning strategies and initiatives to reflect changes in scope, definition of the acquisition workforce and workload. The Council also considers the impact of known and anticipated budget availability on program schedules and hiring possibilities when refining its strategies and initiatives.

### GUIDING PRINCIPLES

FAA's Acquisition Workforce Council has established the following guiding principles for acquisition workforce planning:

#### **Leverage Existing Programs and Best Practices from Across Government.**

While FAA faces unique challenges and drivers, its overall acquisition workforce needs are similar to those of other federal agencies. FAA is capitalizing on acquisition workforce best practices and programs developed across government and industry to reduce the time and cost of developing tools and strategies.

#### **Staff and Shift Resources to Best Meet Needs.**

As acquisition programs move through the phases of the acquisition life cycle, staffing needs change. FAA must staff according to these shifting needs. FAA is staffing with consideration for overall agency needs and priorities first, and individual programs and organizations second. The agency identifies the best fit for each position and looks internally and externally to close skill gaps.

#### **Use an Appropriate Balance of Federal Employees and Contractors.**

FAA uses federal employees to provide consistent, long-term staffing and to maintain core in-house capabilities. FAA supplements its federal workforce with a flexible level of contractors to meet staff and skill requirements that fluctuate over time. This Acquisition Workforce Strategy focuses on the staffing and development needs of the federal workforce.

#### **Implement Innovative Workforce Strategies.**

FAA is implementing aggressive strategies for recruitment, staffing, training and development, and retention. The agency is creating multiple paths for attracting and retaining acquisition workforce talent.

### **Update the Acquisition Workforce Strategy Annually and Consider It a Living Document.**

FAA views workforce planning as a continuous process, and this Strategy is treated as a “strategy in motion.” The Acquisition Workforce Council tracks progress against the strategies, and revises and updates strategies as necessary to meet evolving needs and lessons learned from work-to-date.

## **PLANNING PROCESS**

FAA’s acquisition workforce planning process is consistent with the Government Accountability Office’s (GAO) Principles for Effective Strategic Workforce Planning<sup>6</sup> and the Office of Personnel Management’s (OPM) Workforce Analysis Framework<sup>7</sup>.

The planning process at FAA is based on the high level of commitment and active engagement of senior management from across the agency. The agency’s strategic plans, especially the transformation to NextGen, serve as the basis for assessing future workforce requirements. Workforce planning, however, is not a precise science.

The acquisition workforce, in particular, is hard to count and track because it is role based, not job series based. Employees can move in and out of the acquisition workforce depending on their current role. For example, the end of a contract on one of FAA’s CIP programs may mean that an employee who was serving as a Contracting Officer’s Representative on that contract is no longer serving in that role, and would not be included in the acquisition workforce.

Further, demand projections are complicated by the nature of the work, which is not easily measured in terms of numbers and transactions. The Acquisition Workforce Council, working with the Office of Labor Analysis, is developing and maturing staffing models to validate the expert judgment and experience of senior acquisition professionals related to future workforce staffing requirements. As models mature, FAA will use them to supplement the projections provided by these senior acquisition professionals.

FAA’s approach is about engaging management, linking to the agency’s strategic direction, focusing on critical requirements, and treating the Strategy as a strategy in motion, to be refined on an ongoing basis and formally updated annually.

The table on the following pages highlights key elements of FAA’s process and how it aligns with the OPM and GAO frameworks.

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<sup>6</sup> “Key Principles for Effective Strategic Workforce Planning”, General Accountability Office, GAO-04-39, December 11, 2003.

<sup>7</sup> “Migration Planning Guidance Information Documents: Workforce Planning Best Practices”, Office of Personnel Management, October 7, 2011.

GAO Key Principles	OPM Framework	FAA Process
<p>Principle 1: Involve Top Management, Employees, and Other Stakeholders in Developing, Communicating, and Implementing the Strategic Workforce Plan</p>		<ul style="list-style-type: none"> <li>• FAA's Acquisition Workforce Council, comprised of executives with acquisition responsibilities from across FAA, actively engages in and leads the development, implementation and annual update of the Acquisition Workforce Strategy</li> <li>• Senior managers help define and validate staffing demand projections</li> <li>• Managers and Subject Matter Expert employees from across FAA are engaged in development of competency models and assessments, training and certification programs/policy, recruitment strategies and activities, and other workforce initiatives</li> <li>• The Acquisition Workforce Strategy is published and posted online for employees and other stakeholders, and the Strategy and associated initiatives and programs are briefed to internal and external audiences, including employee forums</li> </ul>
	<p>Analyze Mission, Vision, Strategic Plans, Budgets and Resource Allocation</p>	<p>FAA strategic and business plans help to inform acquisition workforce requirements.</p>

GAO Key Principles	OPM Framework	FAA Process
	<p>Analyze Mission, Vision, Strategic Plans, Budgets and Resource Allocation</p>	<p>Examples include:</p> <ul style="list-style-type: none"> <li>• FAA Strategic Initiatives</li> <li>• NextGen planning documents</li> <li>• NAS Enterprise Architecture</li> <li>• Five-year Capital Investment Plan</li> </ul> <p>The resulting workforce strategy is used to inform future budget formulations, potential workforce gaps, and priority areas for training and development.</p>

GAO Key Principles	OPM Framework	FAA Process
<p>Principle 2: Determine the Critical Skills and Competencies That Will be Needed to Achieve the Future Programmatic Results</p>	<p>Analyze Demand</p>	<p><i>Skills and Competency Requirements</i></p> <p>FAA has developed competency models and critical performance behaviors for 9 of the 11 acquisition professions (see section 7 for descriptions of each model). The models are aligned with Federal Acquisition Institute models for like professions, but tailored to the unique needs of FAA. Inputs to FAA's model include:</p> <ul style="list-style-type: none"> <li>• NAPA study of acquisition skills needed for NextGen (2009)</li> <li>• Stevens Institute study of engineering competencies to design, develop NextGen (2009)</li> <li>• Review of government and industry competency models and benchmarking with other agencies with large, complex acquisitions</li> <li>• Competency model reviews, validation, and assessments with FAA subject matter experts, employee focus groups, and Acquisition Workforce Council members. These stakeholders helped to identify competencies most critical to achieving FAA's strategic goals</li> </ul>



GAO Key Principles	OPM Framework	FAA Process
		<p><i>Staffing Projections</i></p> <ul style="list-style-type: none"> <li>• For organizations managing and staffing acquisition programs, senior managers provide 5-year staffing requirement projections (demand) for each acquisition profession. The projections are based on a nominal \$3 billion budget for the agency's Capital Investment Plan programs</li> <li>• Directors and Vice Presidents validate staffing demand projections based on knowledge and judgment</li> <li>• A validation model is also used to confirm the reasonableness of demand projections. This model, developed by the Office of Labor Analysis, is based on key workforce drivers, e.g. the number of programs by phase of the AMS lifecycle and complexity</li> </ul>

GAO Key Principles	OPM Framework	FAA Process
	Analyze Supply	<ul style="list-style-type: none"> <li>• FAA has defined 11 distinct acquisition professions. Acquisition workforce members have been assigned to each profession based on their primary acquisition role.</li> <li>• Demographic data on each profession is used to create profiles and analyze key profession attributes, including years of experience, grade/career level, and retirement eligibility.</li> </ul>

GAO Key Principles	OPM Framework	FAA Process
Principle 3: Develop Strategies Tailored to Address Gaps and Human Capital Conditions in Critical Skills and Competencies That Need Attention	Conduct Gap Analysis	<ul style="list-style-type: none"> <li>Supply is compared to demand projections for each profession to identify critical projected staffing gaps</li> <li>Certification programs address skill gaps across core acquisition professions</li> </ul>
	Create Workforce Strategy and Plans	<p>The Acquisition Workforce Council has defined:</p> <ul style="list-style-type: none"> <li>Guiding Principles for workforce planning</li> <li>Strategies to address identified gaps and requirements</li> <li>Initiatives to implement the strategies at the agency level and for each profession</li> </ul>
Principle 4: Build the Capability Needed to Address Administrative, Educational, and Other Requirements Important to Supporting Workforce Strategies	Implement Plans	FAA has established an Acquisition Career Manager (ACM) who leads the office of Acquisition Career Management in supporting workforce identification, tracking, planning, training, development and certification
Principle 5: Monitor and Evaluate the Agency's Progress toward Its Human Capital Goals and the Contribution That Human Capital Results Have Made toward Achieving Programmatic Goals	Evaluate Plans	The Acquisition Career Manager tracks progress toward acquisition goals. The Acquisition Workforce Council monitors progress and ensures that acquisition goals are being met

## 5. Acquisition Workforce Strategies

The FAA has established foundational strategies and related initiatives for sustaining a high-performing acquisition workforce. These strategies and the initiatives planned to support them are developed with consideration for the challenges described in the previous section.

Accordingly, they recognize the need to improve FAA's hiring processes, but they emphasize the increasing importance of developing existing employees to meet future acquisition requirements. Together, the strategies help to position the agency as an "Employer of Choice".

Outlined in Exhibit 5.1, the strategies present FAA's plan for:

- Ensuring that our hiring processes both support our organizational needs and foster a positive initial impression on future employees.
- Building our acquisition workforce capability through comprehensive development programs that provide opportunities for employees to build skills in professions that are both rewarding for them and important to FAA's future.
- Maintaining cross-agency commitment to this vital segment of the agency's workforce.

Acquisition Workforce Strategies	
1	Maintain core acquisition staffing levels
2	Continue to strengthen workforce capability
3	Sustain cross-agency focus on the acquisition workforce

### Exhibit 5.1

#### High-Level Strategies

As described in previous updates to this Strategy, FAA has made significant progress implementing the three strategies. Examples of progress to-date include:

- Reduced the agency's time-to-hire to meet the Department of Transportation's goal of 80 days.
- Developed and implemented the NextGen Pathways Internship Program to replenish FAA's pipeline of employees with expertise in Science, Technology, Engineering or Math (STEM) fields. The program has resulted in nine interns converting to federal employment this fiscal year, bringing the total to 56 permanent staff out of more than 100 interns since the program began.

- Hired cost / price analysts at FAA's Atlantic City Technical Center through a creative approach which moved the work to where the resources reside. FAA had difficulty identifying qualified candidates at a reasonable cost in the Washington, D.C. area so the work was moved to where candidates were available.
- Incorporated IT Program and Project Managers into the acquisition workforce and updated program management competencies to reflect the unique needs of these managers.
- Developed and delivered critical FAA-specific acquisition courses to support individual performance and career development across all professions. Courses include:
  - *Introduction to the Acquisition Management System (AMS)*
  - *Introduction to Acquisition Management System (AMS) Lifecycle*
  - *Introduction to AMS Procurement*
  - *The National Airspace System (NAS): A System's Perspective*
  - *Introduction to Systems Engineering at the FAA*
  - *Introduction to FAA Risk Management*
  - *Financial Basics for Contracting Officer's Representatives*
  - *FAA Real Estate Policy and Guidance*
  - *Introduction to FAA Software Cost Estimating*
  - *Maintain It – Your FAA Purchase Card*
  - *NAS Enterprise Architecture (EA) Awareness*
  - *Test and Evaluation Awareness and Practices Overview*
- Developed FAA-specific competency models for core acquisition professions, including Program / Project Management, Systems Engineering, Test and Evaluation, Business - Financial Management, Cost Estimating, Contracting, Real Estate Contracting, Contracting Officer's Representatives, and Integrated Logistics Support.
- Implemented FAA-specific certification programs for Program / Project Management, Systems Engineering, Test and Evaluation, Contracting, Real Estate Contracting, Contracting Officer's Representatives, and Integrated Logistics Support. Where applicable, the certification programs meet or exceed the requirements defined by the Federal Acquisition Institute (FAI).
- Created workforce development tools, like profession-specific *Career Planning, Development and Resource Guides, Development Activities and Competency Experience Checklists*, to support individuals and managers to grow and develop themselves and their employees.
- Developed and provided acquisition training and other development opportunities to support achievement and maintenance of FAA-specific certification programs.
- Established a dedicated Acquisition Career Management organization with responsibility for acquisition profession competency models, certification programs and acquisition-related training development and delivery.

- Consolidated responsibility for core NAS acquisition programs under one organization within FAA's Air Traffic Organization led by a Vice President for Program Management.
- Published the Acquisition Workforce Strategy since 2009 to highlight the importance of the work FAA's acquisition community does for the FAA and the flying public.
- Created communications vehicles, such as websites and workforce planning tools, to support acquisition professionals in developing skills and performing their jobs.

Additional accomplishments that are specific to an individual profession and were achieved in FY 2015 are contained in the profession profiles in Section 7 of this Strategy.

The Appendix to this Strategy contains examples of the workforce development tools created to help individuals and their managers grow and develop professionally. The examples are also available on FAA's acquisition website, <https://ksn2.faa.gov/faq/AcquisitionProfessions/Pages/Default.aspx>.

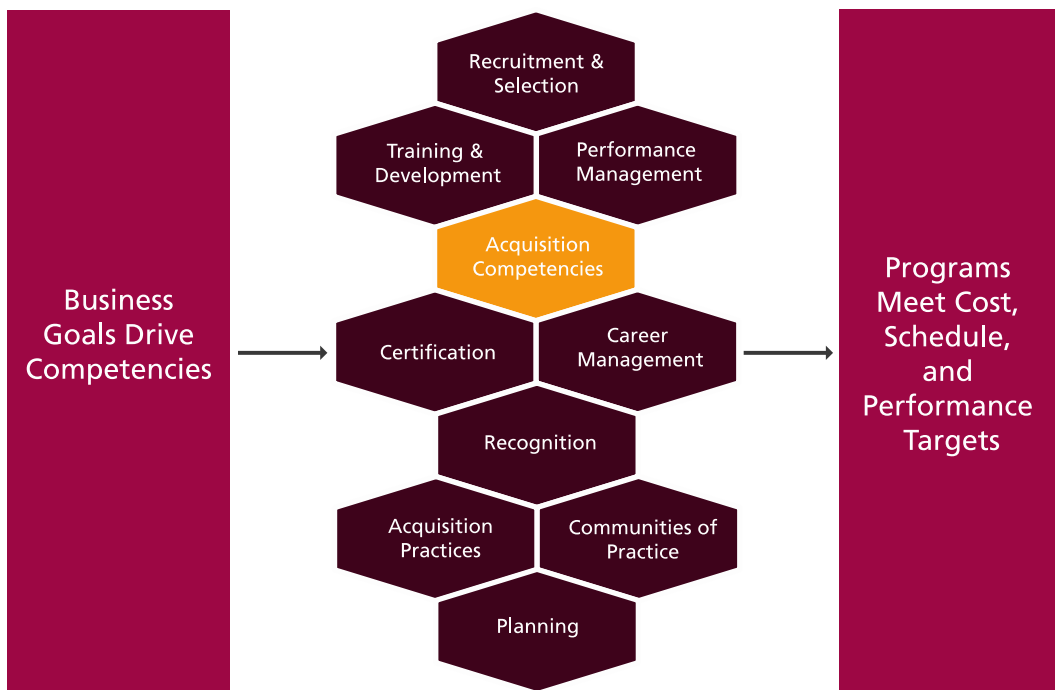
As we continue to evolve acquisition workforce planning, we will adhere to these over-arching strategies, tailoring each to meet the needs of the individual professions. We recognize the need to shift emphasis and add new initiatives over time based on updated analyses and lessons learned. Our emphasis is to retain and develop the existing workforce, along with assessing and filling our most critical positions.

## STRATEGY OVERSIGHT AND IMPLEMENTATION

The Acquisition Workforce Council oversees the execution of this Strategy supported by the Acquisition Career Management group within the Office of Acquisitions, staff in FAA's Finance, Labor Analysis, Program Management, NextGen, and Aviation Safety organizations, and FAA's Office of Human Resources Management. We continue to collaboratively define and implement the acquisition workforce strategies and initiatives.

Our strategies rest upon a common foundation to ensure that FAA's acquisition workforce has the capability to fulfill FAA's business goals and, ultimately, to meet cost, schedule and performance targets for modernizing the NAS. Each acquisition workforce profession contributes uniquely to meeting FAA's business goals and each fulfills a different role and responsibility required for acquisition success.

As depicted in Exhibit 5.2, the competencies unique to each acquisition workforce profession guide every aspect of development for that profession, from recruiting and selecting acquisition professionals to join the FAA community, to training and developing those individuals, to certifying them in their respective professions. We also use competencies to guide the creation of tools and resources to help acquisition professionals be most effective in their roles and to aid them in establishing long-term careers that are rewarding to them and important to FAA.



## Exhibit 5.2

### Framework for Acquisition Workforce Development

We communicate these competencies to ensure that the entire acquisition community understands what is necessary and required, and that the community is moving in the same direction to fulfill its mission of modernizing the NAS. The profession profiles described later in Section 7 of this Strategy provide a full list of the competencies required for each profession.

## STRATEGY 1.

### Maintain core acquisition staffing levels.

FAA's ability to hire the most talented applicants depends upon its ability to attract those applicants in the first place. The needs and interests of prospective employees vary by profession and by the level of employee – entry, mid, and senior – FAA is attempting to attract. Developing recruiting strategies targeted for each profession provides the best chance of attracting well-qualified candidates for specific vacancies.

FAA's recruitment strategies must be supported by an effective hiring process that quickly brings new talent onboard. While budget constraints impact the agency's ability to hire, we must be prepared to act quickly when opportunities to hire are presented. To ensure that we are prepared to take advantage of any hiring opportunities, the agency will continue to focus on improving its hiring process.

Filling the most critical staffing and skill gaps is a high priority for FAA to successfully design, develop, deploy and sustain NAS technologies and infrastructure. This strategy is particularly important given the current constrained and uncertain budget environment. FAA will use acquisition workforce data and associated analyses to identify priority staffing needs.

FAA will continue to refine hiring and staffing strategies to address the need for entry, mid and senior level professionals. We will also continue to enhance and refine our hiring and staffing processes and methods to ensure that we are able to effectively hire and staff wherever and whenever opportunities are presented.

## STRATEGY 2.

### **Continue to strengthen workforce capability.**

To fully contribute to FAA's mission, acquisition professionals require in-depth knowledge of FAA's business, as well as strong technical and leadership skills. Toward a goal of more highly skilled professionals, FAA continues to strengthen the capabilities of its existing and future workforce through its on-going commitment to professional development and certification for acquisition employees.

Section 7 of this Strategy, FAA Acquisition Profession Profiles, describes activities performed and planned for specific professions. FAA is improving its acquisition workforce training and development on a profession-by-profession basis. This approach allows FAA to target the needs of individual professions and be better positioned to increase the number and variety of developmental opportunities available to the entire acquisition workforce community. For example, FAA recently updated the Program / Project Management competency model to better align the competencies with the actual work being performed by the program management community. This further resulted in enhancements to specific courses in FAA's program / project management training curriculum; enhancements that also benefit IT program managers, Systems Engineers, and Test & Evaluation professionals.

To increase the overall capability of the workforce, we will continue to capture and disseminate knowledge so that it is preserved as employees transition across roles and programs, or leave the agency. We will also continue to foster communities of practice to provide ongoing opportunities for the entire community to engage in skill building, knowledge sharing and general support of their professional colleagues.

## STRATEGY 3.

### **Sustain cross-agency focus on the acquisition workforce.**

The Acquisition Workforce Council provides a forum for acquisition workforce planning and improvement activities. Comprised of executives from acquisition organizations across the



agency, the Council is uniquely positioned to advise, direct and focus resources to build and maintain an effective acquisition workforce. Together with acquisition workforce support organizations, like FAA's Acquisition Career Management division, the Council engages in a workforce planning process that informs acquisition workforce hiring, staffing and development decisions.

FAA will continue to improve its focus on the acquisition workforce to include additional communication within the workforce. This will help acquisition professionals better understand certification requirements, training curricula and other developmental opportunities. Also, additional communication of the importance of the acquisition workforce to achieving FAA's goals will help to raise its visibility and secure, or maintain, its resources and capabilities.

# METRICS

FAA has established the metrics listed in Exhibit 5.3 to help measure the success of the Acquisition Workforce Strategy. These metrics will be used to track and report progress over time.

## Exhibit 5.3

### Acquisition Workforce Metrics

Metric / Measure	FY 2015 Performance			
Actual On-Board <sup>1</sup> Number of acquisition positions encumbered.	1,827			
On-Board Staffing Against Prior Year Staffing Levels	Profession	FY 2014	FY 2015 <sup>2</sup>	Delta
	Program / Project Management	284	327	+43
	Research & Engineering	473	479	+6
	Test & Evaluation	139	143	+4
	Business/Financial Management	148	148	0
	Contracting	251	262	+11
	COR	58	51	-7
	Acquisition Law	47	50	+3
	Leadership	58	55	-3
	Logistics	8	5	-3
	Specialized Support	204	229	+25
	Realty Specialist	65	73	+8
	Total	1,739	1,827	+88

Metric / Measure	FY 2015 Performance	
Time to Fill Length of time to fill positions (end-to-end). Calculated by the Office of Human Resources for hiring for all positions.	80 days	
Certified Staff by Profession Percentage certified against total of those whose positions require certification. Calculated as [Certifications] / [Number Requiring Certification].	Position	% Certified
	Contracting Officers/Specialists	91%
	Program Managers <sup>3</sup>	90%
	Contracting Officer's Representatives	52%
	Real Estate Contracting Officers	100%
Attrition Rate Percentage of acquisition workforce leaving the agency, annualized (by attrition type). Calculated as [Left FAA – annualized] / [On-Board – Current]	<u>FY 2014 Actual</u> Retired 3.1% Left FAA <u>1.5%</u> Total 4.6%	

- (1) Based on May 2015 Federal Personnel Payroll System (FPPS) reporting. The delay is necessary to ensure all personnel changes have been identified through FPPS, the official FAA personnel system.
- (2) The acquisition workforce was expanded in FY 2015 to include a NAS requirements organization and information technology program managers. The professions most impacted were Program/Project Management (+67) and Specialized Support (+29).
- (3) Program Managers on Acquisition Category (ACAT) programs 1 - 3 and OMB majors.

## 6. Future Workforce Requirements

FAA projects future workforce requirements to help understand the staffing, resource allocation and development needs of the acquisition community. FAA's senior acquisition managers and executives projected FY 2015 through FY 2020 workforce requirements based on their understanding of acquisition program requirements (including program starts and stops), resource availability (including budgets and technology) and integrated program schedules. The Acquisition Workforce Council reviewed the projections to ensure there is (1) consistency in planning assumptions across the entire acquisition community and (2) application of logical workflow and workload assumptions across the acquisition lifecycle.

FAA confirmed the reasonableness of the demand projections through a validation model developed this year with FAA's Office of Labor Analysis. The model estimates workforce requirements based on workload drivers primarily related to the agency's Capital Investment Plan (CIP) programs; drivers include the number, size, complexity and lifecycle phase of the programs. The validation model also recognizes the need to maintain a stable community of acquisition leadership, management and oversight for which workforce size is not directly driven by CIP programs. FAA will continue to improve the validation model to help refine and improve future workforce projections.

FAA does not expect actual future staffing requirements to perfectly match the projections. FAA does expect, through a comparison of projected future requirements against available staff resources, that the agency can develop and implement plans to prepare and position the acquisition workforce for a reasonably expected future state.

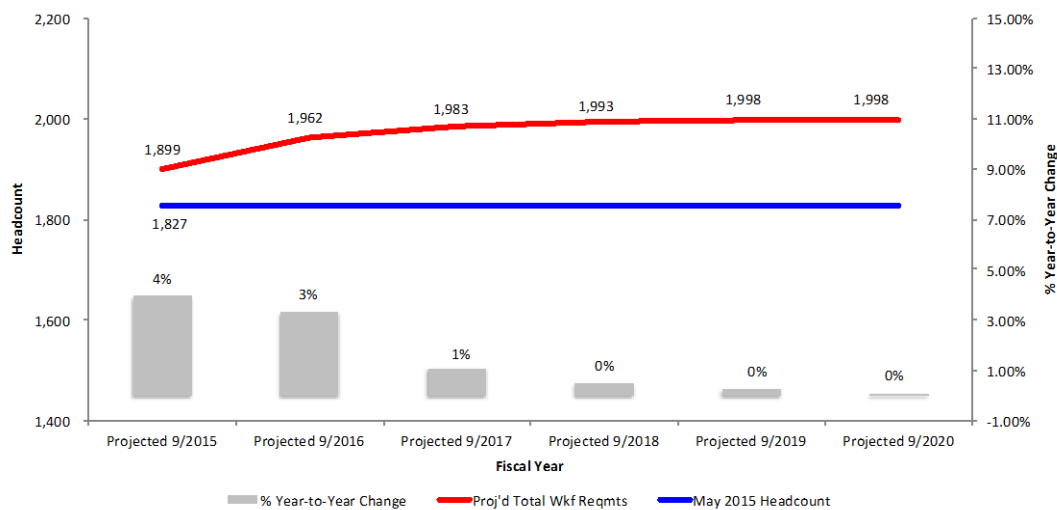
The estimated workforce staffing projections are not hiring targets. They are high-level workload projections that are used to guide the resource decisions and resulting actions necessary to meet future workload requirements. These actions *could* include hiring new employees from outside of FAA into the acquisition workforce, but, given the challenges describe in Section 3 of this Strategy, are equally or more likely to include:

- Re-assigning qualified employees from other areas of FAA into the acquisition workforce.
- Developing existing acquisition workforce members to take on new or more complex responsibilities in the same or other professions.
- Reorganizing or restructuring the work to meet priority workload requirements with the minimum number of resources.
- Reducing workload requirements through program changes, program cancellations or some other means.

As defined in this Strategy, the acquisition workforce in mid FY 2015 includes approximately 1,830 individuals across eleven acquisition professions. Exhibit 6.1 shows that, in FY 2015, FAA's acquisition managers and executives estimate that acquisition programs are currently understaffed by 4 percent (or 70 federal civilian employees). It also shows that the workforce requirement for acquisition personnel across all professions is projected to grow by an additional 3 percent in 2016, 1 percent in FY 2017, and then level off through 2020. By 2020, FAA expects to need 9 percent more acquisition professionals than the 1,830 currently on-board.

## Exhibit 6.1

### Estimated Acquisition Workforce Requirements



A primary driver of the need for additional acquisition workforce professionals is past attrition. Since 2011 FAA has experienced a net loss of over 180 acquisition professionals<sup>8</sup>, many of who were highly skilled and experienced employees. The inability to backfill those positions has led to a smaller, less experienced workforce addressing the acquisition requirements of a stable program portfolio. Attrition forecasts, discussed in Section 2, indicate that the losses will continue.

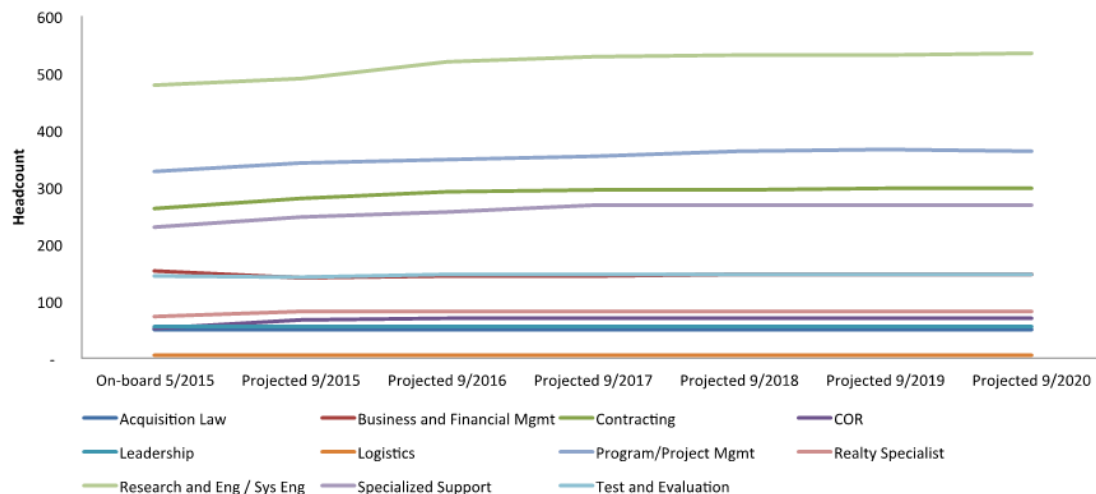
Another driver of the shortfall is the increasing complexity of the programs being developed by the acquisition workforce and introduced into FAA's Enterprise Architecture. Increased complexity, largely driven by the need to manage the significantly greater cross-system integration required by new systems and solutions, drives the need for not only a greater number of acquisition professionals but for an increase in professionals with a high level of experience.

<sup>8</sup> Note: The total acquisition workforce headcount is higher in 2015 than it was in 2011 by over 320, however the total increase is due to changes in the definition of the acquisition workforce that resulted in existing FAA organizations, with both the work and the people already in those organizations, being added into the workforce. The 180 net losses are employees who have left the FAA.

Exhibit 6.2 shows the estimated workforce requirements broken out for each profession through FY 2020. Consistent with the overall workforce, FAA projects a need for additional resources in 2015 for most professions, with continuing, yet smaller, increases after FY 2015 through FY 2020.

## Exhibit 6.2

### Estimated Acquisition Workforce Requirements by Profession



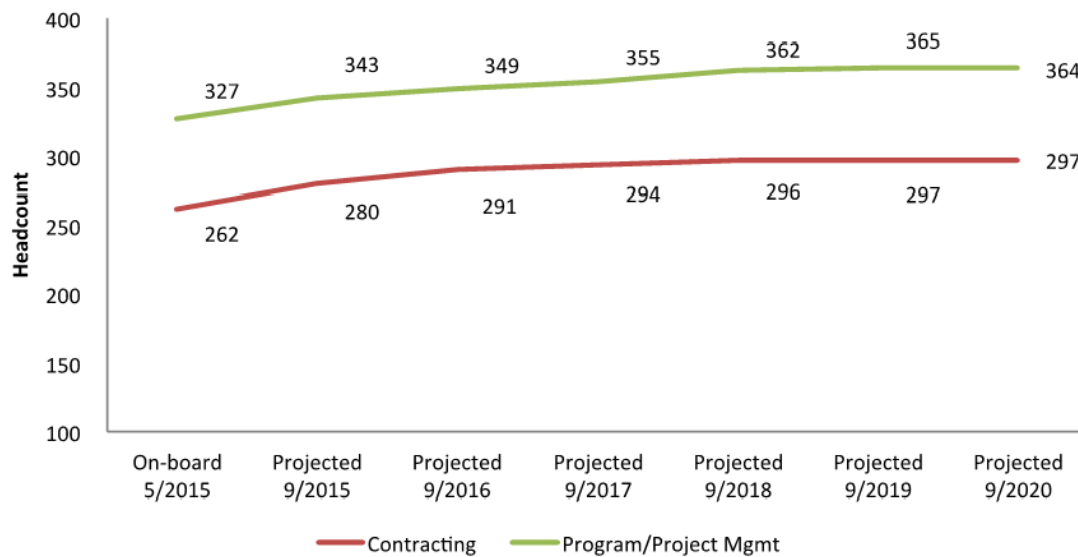
The two professions of greatest concern based on the size of the workforce associated with the profession, the importance to FAA's acquisition programs, and the difficulty of finding qualified candidates are Contracting and Program / Project Management. Exhibit 6.3 shows the projected requirements for the Contracting and Program / Project Management professions through FY 2020.

FAA estimates that Contracting Officers/Specialists are understaffed in 2015 by 7 percent. The requirement for Contracting Officers/Specialists is expected to increase by an additional 4 percent in 2016, and then stabilize through FY 2020. By 2020, FAA expects to need 14 percent more Contracting professionals than the 262 currently on-board.

The Program / Project Management profession is estimated to be understaffed by almost 5 percent in 2015. Workforce requirements for this profession are projected to increase by an additional 2 percent in 2016 and 2017, and then to stabilize through 2020. These projected workforce requirements are based on current workload projections as impacted by projected program budgets and implementation schedules. By 2020, FAA expects to need 11 percent more Program / Project Management professionals than the 327 currently on-board.

### Exhibit 6.3

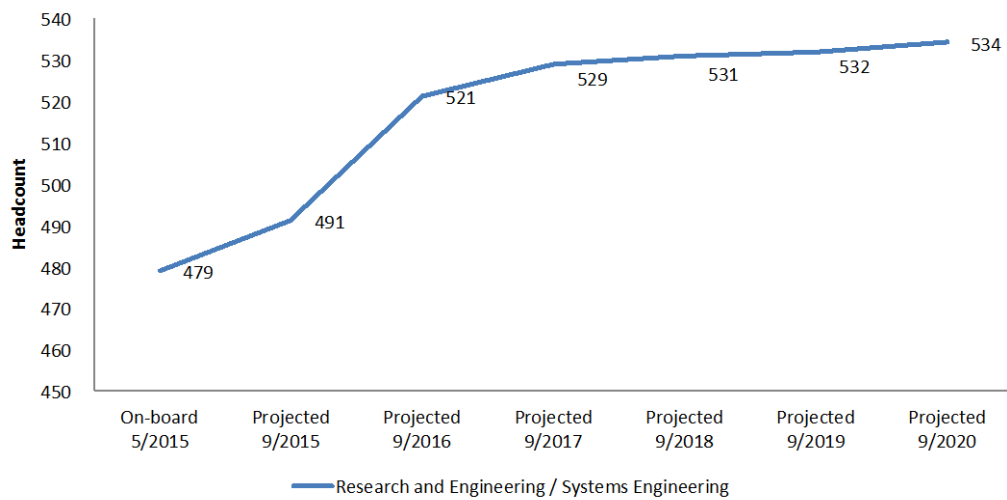
Estimated Acquisition Workforce Requirements for the Program / Project Management and Contracting Professions



The Research and Engineering profession is the largest in the acquisition workforce. Exhibit 6.4 shows the projected requirements for the Research and Engineering profession through FY 2020. The Research and Engineering profession is estimated to be understaffed in 2015 by almost 3 percent. The requirement for these professionals is expected to increase by an additional 5 percent in 2016, and then to stabilize through 2020. By 2020, FAA expects to need 10 percent more Research and Engineering professionals than the 479 currently on-board.

## Exhibit 6.4

### Estimated Acquisition Workforce Requirements for the Research and Engineering Profession



FAA's Acquisition Workforce Strategies, described in Section 5 of this Strategy, are intended to provide the agency with the ability to meet the projected workforce requirements and to ensure that both new and current employees obtain the skills and experience to help FAA meet its acquisition needs and modernization goals. The following section describes each of the acquisition workforce professions in greater detail, including actions planned for FY 2016.



## 7. FAA Acquisition Profession Profiles

The acquisition workforce is comprised of 11 distinct core professions:

- 7.1 Leadership
- 7.2 Program / Project Management
- 7.3 Research and Engineering / Systems Engineering
- 7.4 Test and Evaluation
- 7.5 Business - Financial Management
- 7.6 Contracting
- 7.7 Realty Specialist
- 7.8 Contracting Officer's Representative
- 7.9 Acquisition Law
- 7.10 Integrated Logistics Support Specialists
- 7.11 Specialized Support

Each profession is individually profiled in this section to provide a more complete overview and understanding of the specific profession. The profiles also provide, where appropriate, the unique challenges facing the individual profession, the actions taken in 2015 to develop the profession, and planned actions for ongoing development in FY 2016.

## 7.1 LEADERSHIP PROFILE

### Definition

The Leadership profession includes executives and senior managers providing leadership for acquisition programs and acquisition governance. Acquisition program leaders typically have organizational responsibility for a group of programs.

### Membership

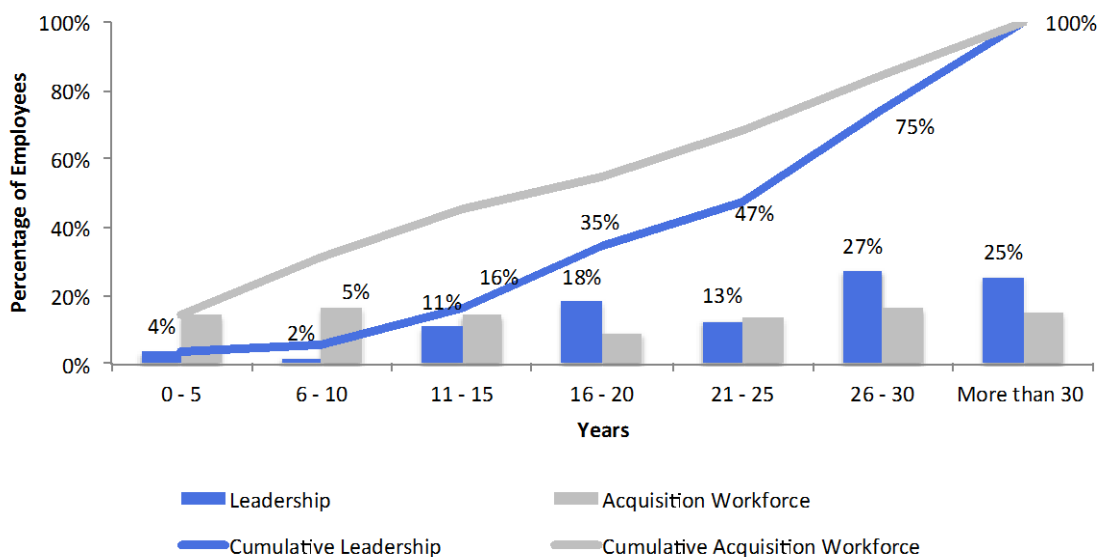
In 2015 there are 55 acquisition employees in FAA's acquisition Leadership profession, or approximately 3 percent of the overall acquisition workforce. These professionals are primarily located at FAA Headquarters in Washington, DC.

### Years of Experience

Leadership professionals are highly experienced and have on average almost 24 years of federal service, 5 years more than the average FAA acquisition employee. As shown in Exhibit 7.1.1, 65 percent of Leadership professionals have been in federal service for 21 or more years. This reflects the seniority of the members in this profession.

### Exhibit 7.1.1

#### Leadership Federal Service

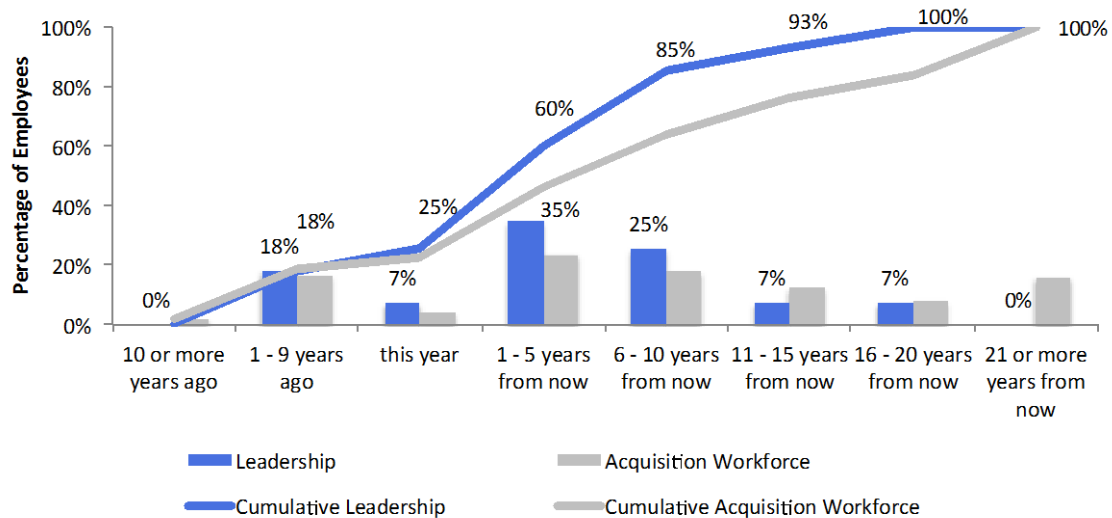


## Retirement Eligibility

Exhibit 7.1.2 shows the retirement eligibility profile for the acquisition employees in the Leadership profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Consistent with longer federal service, employees in the Leadership profession could potentially retire earlier than the average acquisition workforce employee; 85 percent of the Leadership profession is eligible to retire within 10 years, versus 64 percent of the overall workforce.

### Exhibit 7.1.2

#### Leadership Retirement Eligibility



## Typical Job Roles

- Senior Executives
- Directors
- Division Managers

## Critical Competencies

The Leadership competencies are also integrated into the competency models of other professions as appropriate.

General Leadership Competencies	
<ul style="list-style-type: none"><li>• Managing Organizational Performance</li><li>• Accountability and Measurement</li><li>• Problem Solving</li><li>• Business Acumen</li><li>• Customer Focus</li><li>• Building Teamwork and Collaboration</li><li>• Building a Model EEO Program</li><li>• Developing Talent</li></ul>	<ul style="list-style-type: none"><li>• Communications</li><li>• Building Alliances</li><li>• Interpersonal Relations and Influence</li><li>• Integrity and Honesty</li><li>• Vision</li><li>• Strategy Formulation</li><li>• Agility</li><li>• Innovation</li></ul>

## 7.2 PROGRAM / PROJECT MANAGEMENT PROFILE

### Definition

The Program / Project Management (P/PM) profession includes employees who have primary responsibility for the management and oversight of FAA acquisition programs and projects. This occupation supports the following phases in the acquisition life cycle: Research for Service Analysis, Service Analysis & Strategic Planning, Concept and Requirements Definition, Investment Analysis, and Solution Implementation. It involves establishing, tracking, managing, and reporting all aspects of Program / Project planning and execution, including budgeting, technical requirements, personnel, and user needs. The profession does not include program support personnel.

### Membership

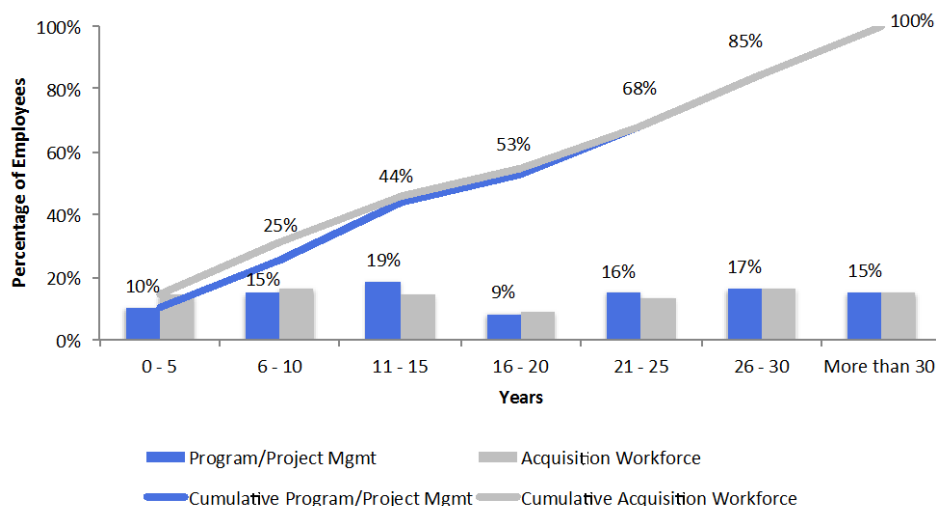
In 2015 there are 327 acquisition employees performing Program / Project Management duties, or approximately 18 percent of the overall acquisition workforce. Approximately 40 of these professionals are Program Managers on FAA's largest acquisition programs. These Program Managers are subject to FAA certification requirements described in this profile. This year the Information Technology (IT) Program / Project managers from the Office of Information and Technology were added to the Acquisition Workforce.

### Years of Experience

The average federal service tenure of Program / Project Management professionals is 19 years, which is the average for the overall workforce. Exhibit 7.2.1 shows the distribution of years of federal service for these professionals. Almost half of Program / Project Management professionals have been in federal service for 21 or more years.

### Exhibit 7.2.1

Program / Project Management Federal Service

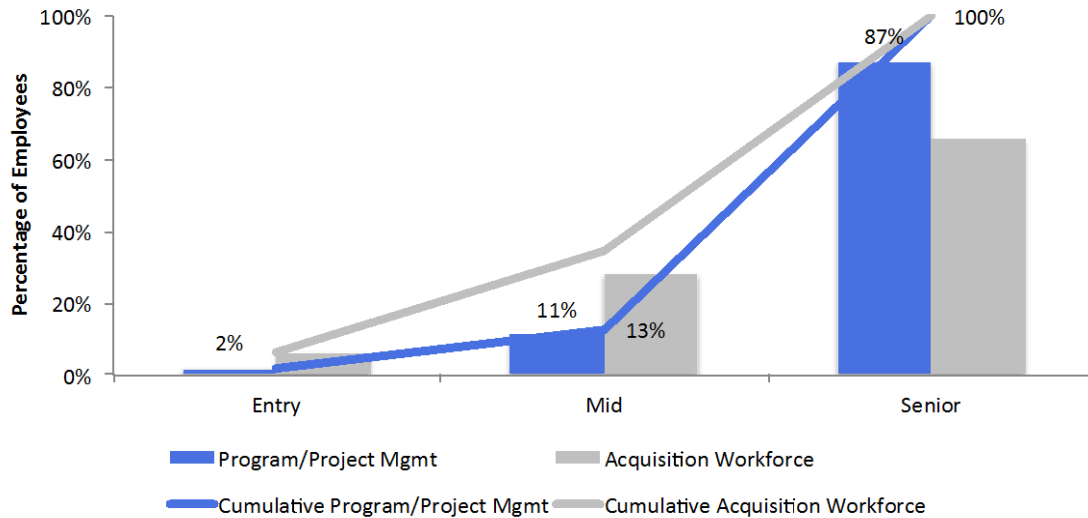


## Career Levels<sup>9</sup>

Exhibit 7.2.2 shows the career level distribution for the Program / Project Management profession. Eighty-seven percent of the members of this profession are categorized as Senior, meaning that their pay bands are in the J Band and higher, and General Schedule equivalents. Program / Project managers are typically some of the most senior members of the acquisition workforce.

### Exhibit 7.2.2

Program / Project Management Career Levels



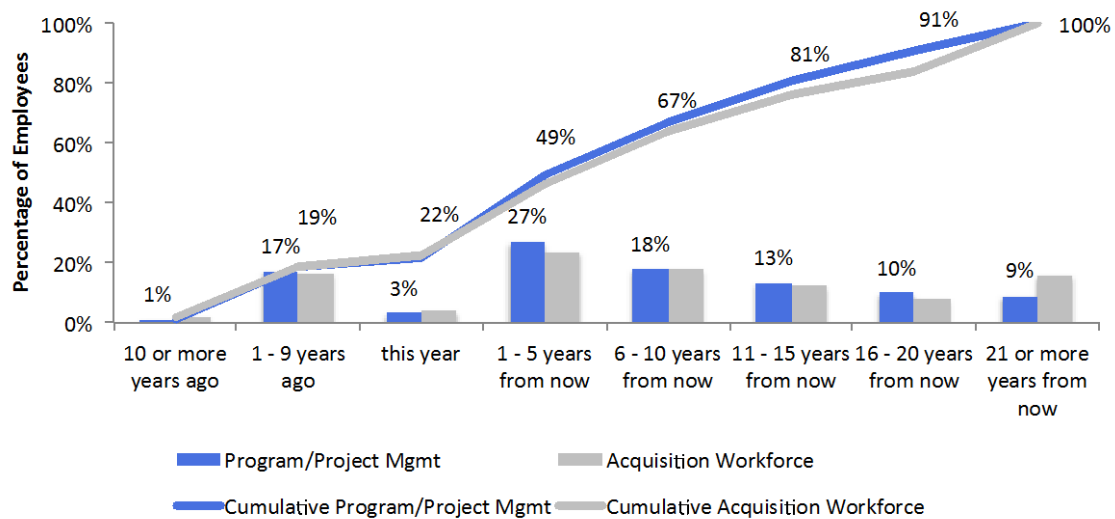
## Retirement Eligibility

Exhibit 7.2.3 shows the retirement eligibility profile for the acquisition employees in the Program / Project Management profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Twenty-two percent of employees in the Program / Project Management profession are eligible for retirement by the end of this year, consistent with the average for the overall acquisition workforce.

<sup>9</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

## Exhibit 7.2.3

### Program / Project Management Retirement Eligibility



Typical job roles for acquisition employees in this profession include:

- Program Manager
- Project Manager
- Acquisition Manager
- Project Lead
- Portfolio Manager

Typical job series in this profession include:

- 340 – Program Management
- 800 series – Engineering Group
- 2186 – Aviation Technical Systems Specialist

### Critical Competencies

FAA's Program / Project Manager competencies were validated in 2015 and enhanced with performance indicators at basic, intermediate, and advanced levels of performance. The table below lists the validated competencies.

Program / Project Management	
<b>Technical Competencies:</b> <ul style="list-style-type: none"> <li>• Contracting and Procurement</li> <li>• Financial Planning, Monitoring and Control</li> <li>• Lifecycle Logistics Management</li> <li>• Organizational Awareness</li> <li>• Program / Project Planning, Monitoring and Control</li> <li>• Requirements Development and Management</li> <li>• Risk Management</li> <li>• Systems Engineering</li> <li>• Information Management</li> </ul>	<b>Non-Technical Competencies:</b> <ul style="list-style-type: none"> <li>• Agility</li> <li>• Building Alliances</li> <li>• Communications</li> <li>• Customer and Stakeholder Management</li> <li>• Interpersonal Relations and Influence</li> <li>• Problem Solving and Decision-making</li> <li>• Teamwork and Collaboration</li> </ul>

## Certification

The Program / Project Management (P/PM) certification program supports certification of professionals at three distinct levels: Entry, Mid and Senior. These levels reflect the increasing responsibility and capability required of the Program Manager as programs become larger, more complex, and more highly integrated with other programs. FAA's policy requires Program Managers on FAA's largest, most complex acquisition programs to become certified within specific timeframes from the date of program assignment.

Certification requirements were updated in FY 2015. Certification requirements are met through a combination of factors, which include experience in the profession, completion of targeted training (both internal and external to FAA) and attainment of industry-recognized certification. All acquisition certifications are competency-based. Applicants must provide evidence of fulfillment of the competencies at the level for which they are applying.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The Program / Project Management certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.



## Challenges

- The ability to manage a portfolio of investments to achieve mission effectiveness is critical. To meet evolving NextGen program requirements, there is a significant need for technical and program integration across organizations, domains and agencies, and the ability to identify and manage interdependent program risk.
- Entry-level hiring is not effective because of the complexity of Program Management. Program Managers require years of experience and often are promoted from other career professions (e.g., Research and Engineering).
- Developing new Program Managers takes time. New in-house Program Managers are often promoted from other career professions, typically later in their careers. Identifying and developing these new candidates will require additional focus as experienced Program Managers retire and as budget constraints limit FAA's ability to hire externally.

## Activities in 2015

- On track to meet the FY 2015 goal of 90 percent of PMs managing FAA's most complex acquisition programs meeting or maintaining certification requirements for their positions.
- Established an organizational baseline of skills training and development needs. 75 percent of all Program Management Organization (PMO) employees had a professional and career development Managers Conversation with their manager. 100 percent of all PMO employees received an Employee Development Resource Card listing their roles, programs, training requests, certifications and skills development history, inviting further engagement and input.
- Conducted multiple leadership and program management development forums:
  - Manager's Symposiums. Quarterly Manager training and program leadership forums.
  - Leadership Conversations. Bi-monthly informal roundtable discussions between Front Line Managers, Middle Managers and Senior PMO Leadership.
  - PMO Workshop: Stakeholder Engagement. Periodic brown bag lunch networking and development events.
  - Mission-Driven Workshops for program teams blending training with hands on expert help working on specific deliverables and milestones
- Enhanced Program / Project Management certification requirements to align with changes in the Federal Acquisition Institute's FAC-PM and FAC-IT PM certification programs.
- Published new and enhanced career development tools, including the *Program / Project Management Career Planning, Development and Resource Guide*, the *Competency Experience Checklist* and the *Development Activities Guide*, to support competency knowledge and skill development and evaluation.
- Continued to offer training and industry certification programs for Program / Project Management professionals.
- Continued to enhance the Program / Project Management community of practice web portal to provide guidance and tools to support career development, and provide links to certification requirements and applications.

## Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Continue to build-out and enhance the P/PM community portal	Expanded content	Quarterly
Analyze, refine and enhance P/PM curriculum	Robust curriculum	3rd Quarter
Ensure employees meet the certification requirements for their position	Monthly metrics provided to the Acquisition Workforce Council	Monthly
Monitor Government-wide initiatives that could impact the certification requirements for P/PM. Impacts will be reviewed to determine if changes to FAA's contracting certification program are required	Status reports to the Acquisition Workforce Council, as needed	Quarterly
Migrate to the government-wide acquisition training and certification system, FAITAS	P/PMs registered in FAITAS	1st Quarter
Outreach to improve and stimulate the developmental interests of the P/PM community	Increased volume of certifications	Semi Annually
Conduct second round of PMO manager and employee development discussions	Updated Employee Development Resource Card	4th Quarter

## 7.3 RESEARCH AND ENGINEERING / SYSTEMS ENGINEERING PROFILE

### Definition

Research is the process of investigating and examining an issue or need from different perspectives that may lead to the development of a practical solution or approach. Engineering is the profession of applying scientific knowledge and using natural laws and physical resources to design and implement materials, structures, machines, devices, systems and processes that realize a desired objective and meet specified criteria. This profession focuses on Applied Research conducted to solve problems or answer specific questions in response to a stakeholder requirement.

As a combined community, Research and Engineering contains many professional sub-professions and roles. Systems Engineering, Software Engineering, Human Factors Engineering and Safety Engineering are highlighted here.

**Systems Engineering.** The field of Systems Engineering concentrates on the design and application of the whole system as distinct from its parts. At a National Airspace System (NAS) level, Systems Engineering cuts across individual systems and acquisition programs to achieve an integrated, consistent and consolidated NAS design. At a program level, Systems Engineering provides oversight of the systems development effort from initial requirements and specification development through implementation. Systems Engineering has two main purposes in FAA acquisitions. The first is to ensure that acquisitions are conducted from initial requirements to deployment and life cycle support in a consistent, repeatable, well-formulated manner. The second is to ensure that these acquisitions form an integrated whole. High quality individual pieces only make an improved NAS if their integration is specifically considered during acquisition. While policy, benefits and cost will ultimately determine what will be acquired, these all must be addressed in a context of cross-NAS implication and integration provided by NAS-level Systems Engineering.

**Software Engineering.** Software engineering is the application of a systematic, disciplined, quantifiable approach to the design, development, operation and maintenance of software, and the study of these approaches. It is the application of engineering to software.

**Human Factors Engineering.** Human Factors Engineering is an integral part of Systems Engineering and ensures that human-in-the-loop system performance objectives are met. The application of Human Factors Engineering during all phases of an acquisition program addresses the role of the human component in system design. One objective of Human Factors Engineering is to reduce the number and consequences of human errors that may result in incidents/accidents by aviation equipment users and maintainers. The application of

Human Factors Engineering can also increase productivity and improve overall NAS performance.

Safety Engineering. The field of Safety Engineering includes positions that require the performance of professional engineering work to eliminate or control hazardous conditions resulting from human error, equipment and machine operations, which may lead to injury to persons and damage to property. This work requires the application of: (a) advanced mathematical techniques; (b) professional engineering principles, methods and techniques; (c) safety related elements of the physical sciences, ergonomics, psychology and physiology; and (d) safety principles, standards, practices and analytical techniques.

## Membership

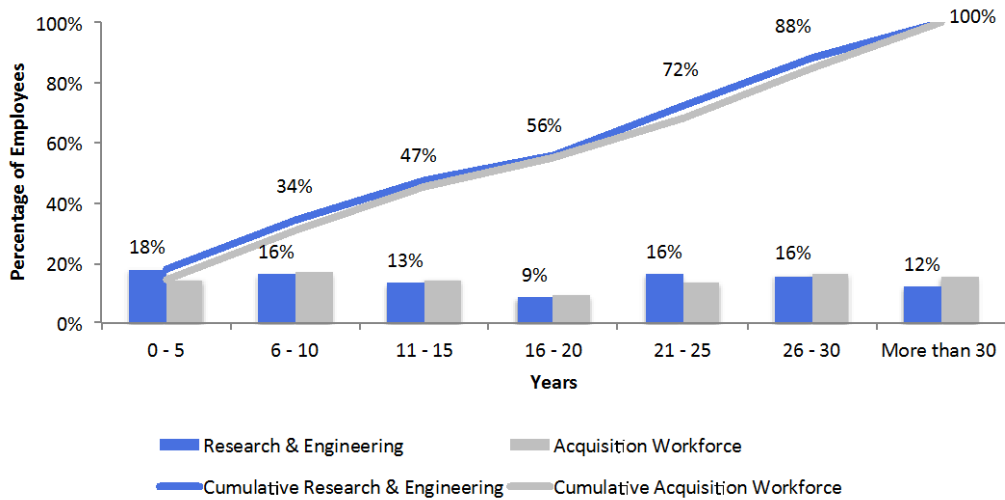
Research and Engineering is the largest profession in FAA's acquisition workforce. In 2015 there are 479 acquisition employees in FAA's acquisition Research and Engineering profession, or approximately 26 percent of the overall acquisition workforce. There are many more individuals who support FAA in research and engineering roles that are not part of the core acquisition workforce due to the nature of their work and the programs they support. These individuals represent the broader workforce from which talent may be developed or acquired to meet future acquisition workload needs.

## Years of Experience

The average length of federal service for Research and Engineering professionals is 17 years, one year less than the overall acquisition workforce. As seen in Exhibit 7.3.1, the lower average years of service is largely due to the higher proportion of employees with 5 or fewer years of federal experience. This is consistent with FAA's strategy of hiring and developing employees to serve as Research and Engineering professionals.

## Exhibit 7.3.1

### Research and Engineering Federal Service

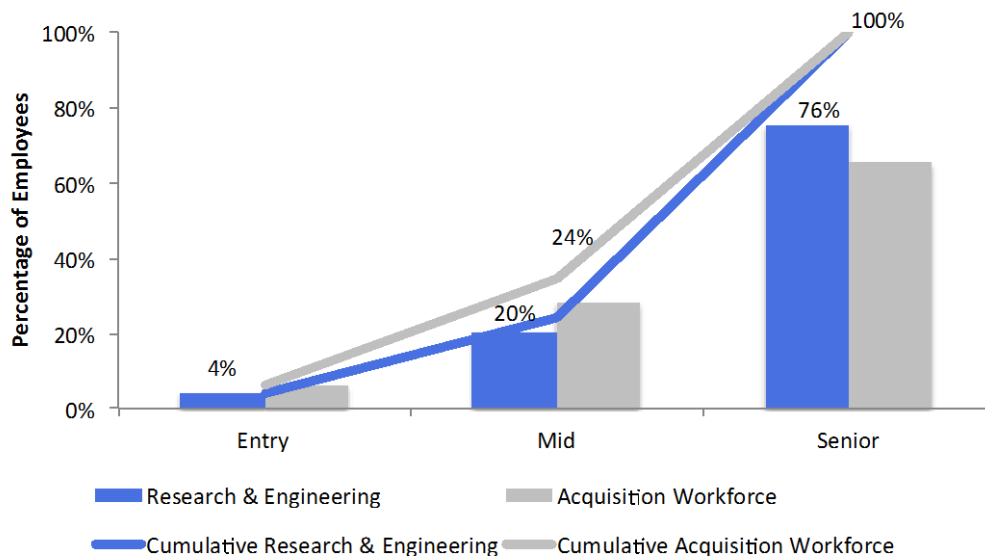


## Career Levels<sup>10</sup>

Exhibit 7.3.2 shows the career level distribution for the Research and Engineering profession. Seventy-six percent of the members of this profession are categorized as Senior, meaning that their pay is in, or higher than, the J Band or its General Schedule equivalent.

## Exhibit 7.3.2

### Research and Engineering Career Levels



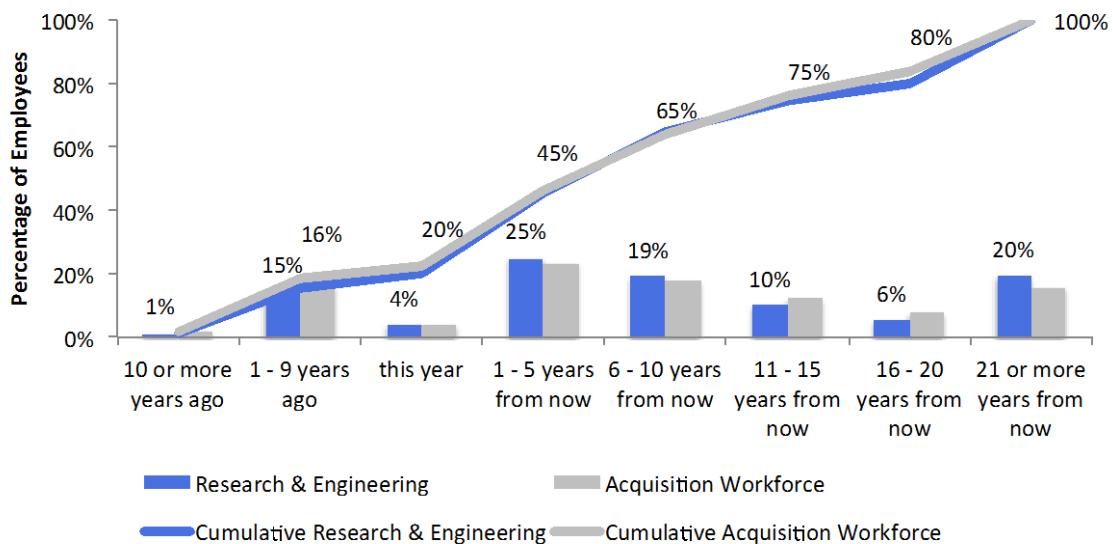
<sup>10</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

## Retirement Eligibility

Exhibit 7.3.3 shows the retirement eligibility profile for the acquisition employees in the Research and Engineering profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Research and Engineering professionals have a retirement eligibility profile similar to the overall acquisition workforce.

### Exhibit 7.3.3

#### Research and Engineering Retirement Eligibility



Typical job roles for acquisition employees in this profession include:

- Operations Research Analyst
- Chief Systems Engineer
- Systems Engineer
- Software Engineer
- Human Factors Engineer/Specialist
- Systems Architect

Typical job series in this profession include:

- 800 series – Engineering Group
- 1300 series – Physical Science Group
- 1500 series – Mathematics and Statistics Group, including Computer Scientists

## Critical Competencies

The following competencies were developed in collaboration with the Systems Engineering community and the Acquisition Workforce Council.

Systems Engineering Competencies	
<b>Technical:</b> <ul style="list-style-type: none"><li>• Acquisition and Lifecycle Management</li><li>• Configuration Management</li><li>• Data Collection and Analysis</li><li>• FAA Operations and Strategic Alignment</li><li>• Interface Management</li><li>• Requirements Development and Management</li><li>• Risk Management</li><li>• Systems Integration</li><li>• Systems Thinking and Application</li><li>• Technical Assessment and Analysis of Alternatives</li><li>• Validation</li><li>• Verification</li></ul>	<b>Non-Technical:</b> <ul style="list-style-type: none"><li>• Agility</li><li>• Communications</li><li>• Customer and Stakeholder Management</li><li>• Influence and Negotiation</li><li>• Problem Solving and Decision-making</li><li>• Project Management</li><li>• Teamwork and Collaboration</li></ul>

## Certification

The Systems Engineering certification program supports certification of professionals at three distinct levels: Entry, Mid and Senior. These levels reflect the increasing responsibility and capability required of the Systems Engineer as programs become larger, more complex and more highly integrated with other programs. Certification as a Systems Engineer is not mandatory.

The Systems Engineering certification program was updated in FY 2015 to better align with industry systems engineering certification programs. Certification requirements are met through a combination of factors, which include experience in the profession, training (both internal and external to FAA), external certification requirements and external certification equivalencies. All acquisition certifications are competency-based. Applicants must provide evidence of fulfillment of the competencies at the level for which they are applying.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The Systems Engineering certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- Recruiting and hiring to meet the increased demand for all levels of Systems Engineers, and various engineering roles, is extremely competitive. Hiring continues to be difficult with current budget constraints.
- Hiring authority is often limited to backfills with junior engineers. FAA systems (e.g., communications, safety critical automation) are in themselves very complex and junior engineers don't have the hands on experience that gives them the expertise to do oversight of acquisition engineering that the senior engineers who came from the military or FAA's Technical Operations have.
- Engineers must understand the implications of working in an increasingly complex systems of systems environment, while maintaining a systems view of their projects and products.
- Engineers must recognize that working in a complex, integrated technological environment requires even greater connections (or use collaboration or coordination) across organizational and domain boundaries to ensure seamless integration of systems and products.
- Increasing the membership in and use of discussion groups, such as the SE Forum, as knowledge and information sharing opportunities across the community. The Research and the Engineering communities must ensure that they maintain up-to-date technical and scientific knowledge in their specialty area.
- Supporting the career growth or evolution of members of the Test and Evaluation profession who are interested in developing Systems Engineering competencies.
- Future systems will require more systems thinking and systems integration than has been required for legacy systems. This will require both development of existing staff and hiring new staff with broader systems integration experience.

## Activities in 2015

- Converted nine interns to federal employment through the Pathways Internship Program, which focuses on replenishing the agency's pipeline of employees with expertise in Science, Technology, Engineering, or Math (STEM) fields.
- Integrated the results from the external benchmarking review of the Systems Engineering certification program into the existing program.
- Updated the Systems Engineering certification program to better align with industry certification requirements developed by the International Council on Systems Engineering (INCOSE).
- Continued to communicate Systems Engineering training requirements to support achievement of the required competencies.
- Developed and offered additional Systems Engineering courses to build the required competencies.



- Published new and enhanced career development tools, including the *Systems Engineering Career Planning, Development and Resource Guide*, the *Competency Experience Checklist* and the *Development Activities Guide*, to support competency knowledge and skill development and evaluation.
- Offered industry certification programs for Systems Engineering professionals.
- Continued to enhance the Systems Engineering community of practice web portal to provide guidance and tools to support career development, and provide links to certification requirements and applications.

#### Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Build-out and enhance the Systems Engineering community portal	Expanded content	1st Quarter
Analyze, refine and enhance Systems Engineering curriculum	Robust curriculum	Annually
Outreach to improve and stimulate the developmental interests of the Systems Engineering community	Increased volume of certifications	Semi-Annually

## 7.4 TEST AND EVALUATION PROFILE

### Definition

Test and Evaluation (T&E) is the process associated with testing, analyzing and evaluating in order to verify and validate that products meet specifications, satisfy requirements and are operationally suitable and effective. T&E personnel require the knowledge of efficient and cost effective methods for planning, monitoring, conducting and evaluating tests of equipment and material. T&E personnel also need a thorough strategy to verify system or service performance through measurable methods and validate that the system or service will fulfill its intended purpose when placed in its intended environment. Developmental testing verifies that all specified technical and performance requirements have been met and that the system is fully integrated and stable, and that it has no adverse effect on the rest of the NAS. Operational testing validates that a new or modified system or service is operationally effective and suitable for use in the NAS and the NAS infrastructure is ready to accept the system.

Systematic and comprehensive T&E promotes the development of quality products by systematically checking for defects and deviations. T&E plays a critical role in all acquisition phases. T&E Planning and Support activities support the development of concepts, requirements, acquisition strategies, contract items, design and development. Quality T&E practices and reporting provide effective risk management and decision support for acquisition planning and milestones. The developmental and operational test phases of an acquisition program require design testing to a mature readiness level, component and system integration and operational validation.

### Membership

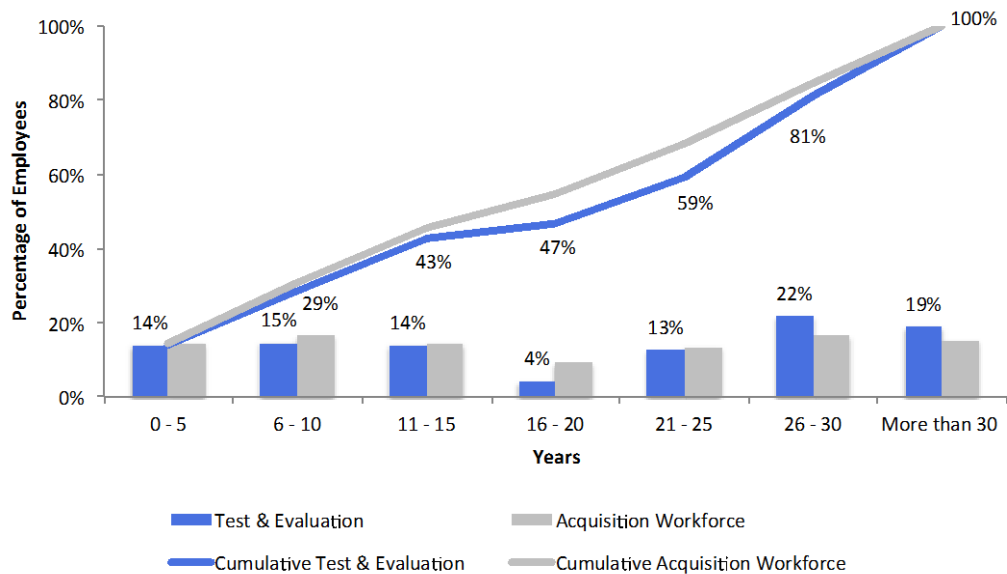
Individuals who work in the T&E career field are technical professionals who plan, perform and manage T&E tasks and team activities in support of acquisition programs. In 2015 there are approximately 143 acquisition employees in FAA who have primary responsibility for T&E, or approximately 8 percent of the overall acquisition workforce. The majority of these employees work at FAA's William J. Hughes Technical Center in Atlantic City. T&E is the Technical Center's primary mission; the Center is committed to providing a world-class laboratory dedicated to the T&E of critical NAS systems to maximize the quality of T&E products and services, promote effective T&E planning, reduce program risks, decrease program costs and reduce latent defects.

### Years of Experience

The average length of time that T&E professionals have been in federal service is just over 20 years, higher than the average acquisition employee (19 years). The distribution of tenure is shown in Exhibit 7.4.1.

## Exhibit 7.4.1

### Test and Evaluation Federal Service

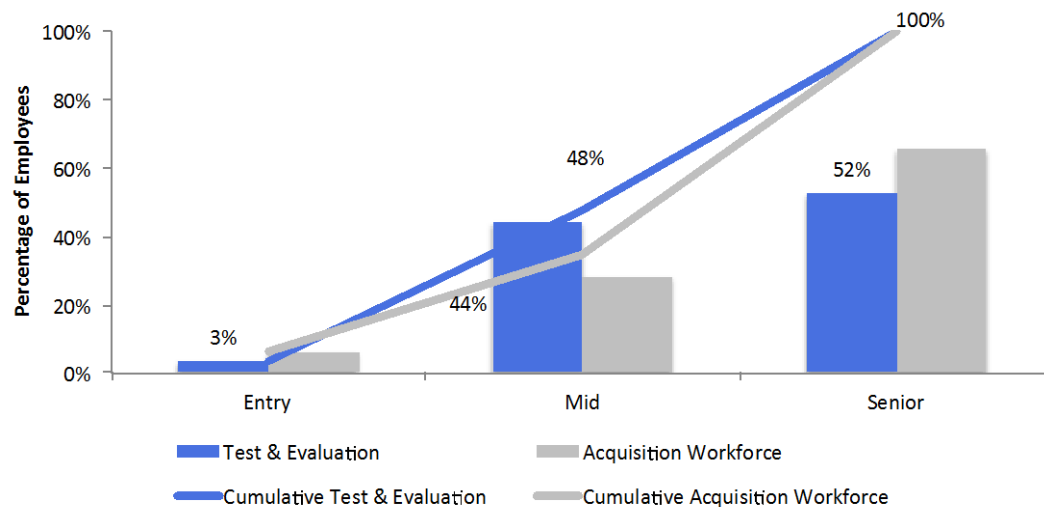


## Career Levels<sup>11</sup>

Exhibit 7.4.2 shows the career level distribution for the Test & Evaluation profession. Employees in this profession work primarily in the Mid and Senior career levels, with more than half at the Senior level.

## Exhibit 7.4.2

### Test and Evaluation Career Levels



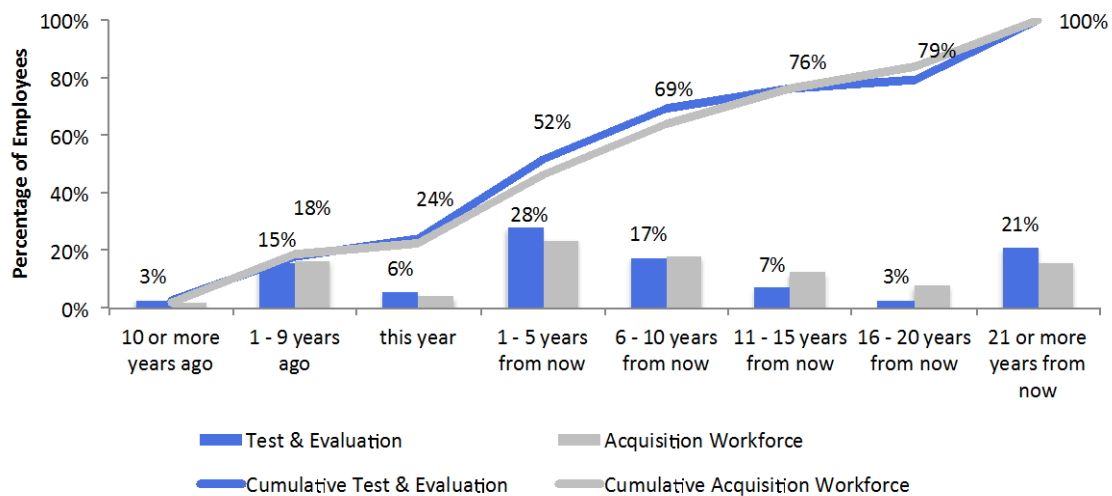
<sup>11</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

## Retirement Eligibility

Exhibit 7.4.3 shows the retirement eligibility profile for the acquisition employees in the T&E profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Twenty-four percent of current T&E employees will be eligible for retirement by the end of this year.

### Exhibit 7.4.3

#### Test and Evaluation Retirement Eligibility



Typical job roles for acquisition employees in this profession include:

- Test Team Manager
- Test Director
- Test Lead
- Test Engineer
- Operations Research Analyst
- Experimental Designer
- Flight Test Engineer

Typical job series in this profession include:

- 334 - Computer Specialist
- 800 series – Engineering and Architecture Group
- 1500 series – Mathematics and Statistics Group, including Computer Scientists

## Critical Competencies

The T&E competencies were validated in 2011. They consist of:

Test and Evaluation Competencies	
<p>Technical:</p> <ul style="list-style-type: none"><li>• Acquisition and Contracts</li><li>• Data Collection, Analysis, and Reporting</li><li>• NAS Operations</li><li>• Quality Assurance, Quality Control and Configuration Management</li><li>• Requirements Management</li><li>• Risk Management</li><li>• Safety Management</li><li>• Systems Thinking and Application</li><li>• Technical Writing</li></ul>	<ul style="list-style-type: none"><li>• Test and Evaluation Standards Application</li><li>• Test Management</li><li>• Test Theory and Methods Application</li></ul> <p>Non-Technical:</p> <ul style="list-style-type: none"><li>• Agility</li><li>• Communications</li><li>• Customer and Stakeholder Management</li><li>• Interpersonal Relations and Influence</li><li>• Problem Solving and Decision-making</li><li>• Teamwork and Collaboration</li></ul>

## Certification

The Test and Evaluation certification program supports certification of professionals at three distinct levels: Entry, Mid and Senior. These levels reflect the increasing responsibility and capability required of the Test and Evaluation specialist as programs become larger, more complex and more highly integrated with other programs. Certification as a Test and Evaluation specialist is not mandatory.

Certification requirements are met through a combination of factors, which include experience in the profession and training (both internal and external to FAA). All acquisition certifications are competency-based. Applicants must provide evidence of fulfillment of the competencies at the level for which they are applying.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The Test and Evaluation certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- Future systems will require more integrated testing.
- Maintaining an adequate workforce with the right expertise and skill mix.
- NextGen capabilities are allocated across systems, requiring new ways to test requirements across systems, not just to a single system.

## Activities in 2015

- Published new and enhanced career development tools, including the *Test & Evaluation Career Planning, Development and Resource Guide*, the *Competency Experience Checklist* and the *Development Activities Guide*, to support competency knowledge and skill development and evaluation.
- Continued to enhance the Test & Evaluation community of practice web portal to provide guidance and tools to support career development, and provide links to certification requirements and applications.

## Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Build-out and enhance the Test & Evaluation community portal	Refreshed content	2nd Quarter
Analyze, refine and enhance Test & Evaluation curriculum	Robust curriculum	Annually
Outreach to improve and stimulate the developmental interests of the Test & Evaluation community	Increased volume of certifications	Semi-Annually

## 7.5 BUSINESS - FINANCIAL MANAGEMENT PROFILE

### Definition

Employees in this profession use their knowledge of financial systems and business processes to: develop, coordinate and integrate performance-based budgets; write informative justifications for budget requests; develop metrics; plan, manage, track, reconcile and report financial transactions; develop cost projections; develop recommendations to mitigate financial risks; and provide financial and investment analysis.

### Membership

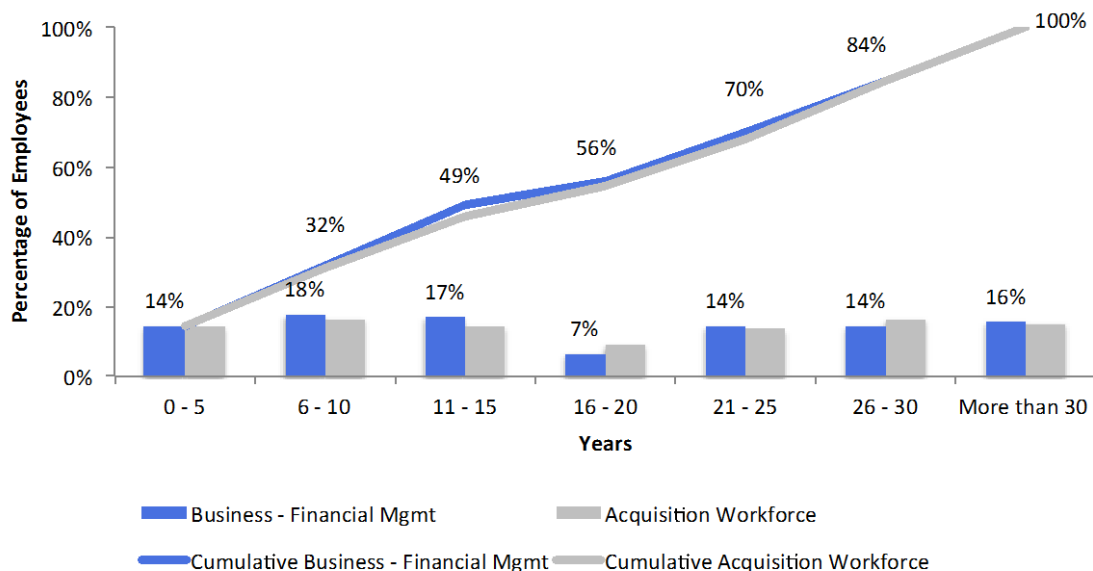
In 2015 there are approximately 153 acquisition employees in FAA acquisition Business - Financial Management profession, or 8 percent of the overall acquisition workforce. Employees in this profession include personnel in program offices as well as personnel in FAA's Finance organization.

### Years of Experience

The average tenure of Business - Financial Management professionals in federal service is 18 years. Fourteen percent of Business - Financial Management professionals have been in federal service for 5 or fewer years. The distribution of tenure is shown below in Exhibit 7.5.1.

### Exhibit 7.5.1

Business - Financial Management Federal Service

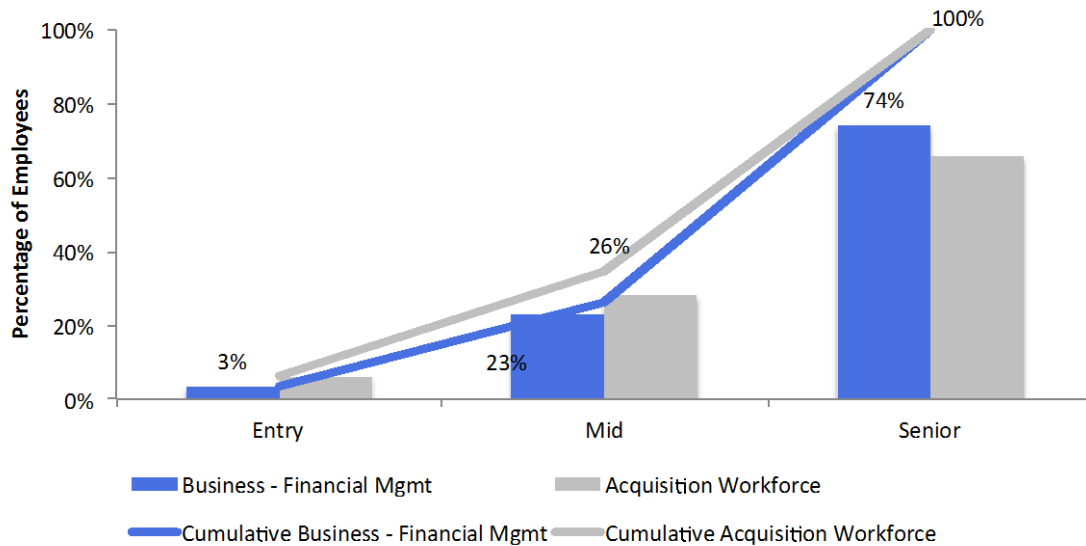


## Career Levels<sup>12</sup>

Exhibit 7.5.2 shows the career level distribution for the Business - Financial Management profession. Seventy-four percent of Business - Financial Management professionals are at the Senior level.

### Exhibit 7.5.2

Business - Financial Management Career Levels



## Retirement Eligibility

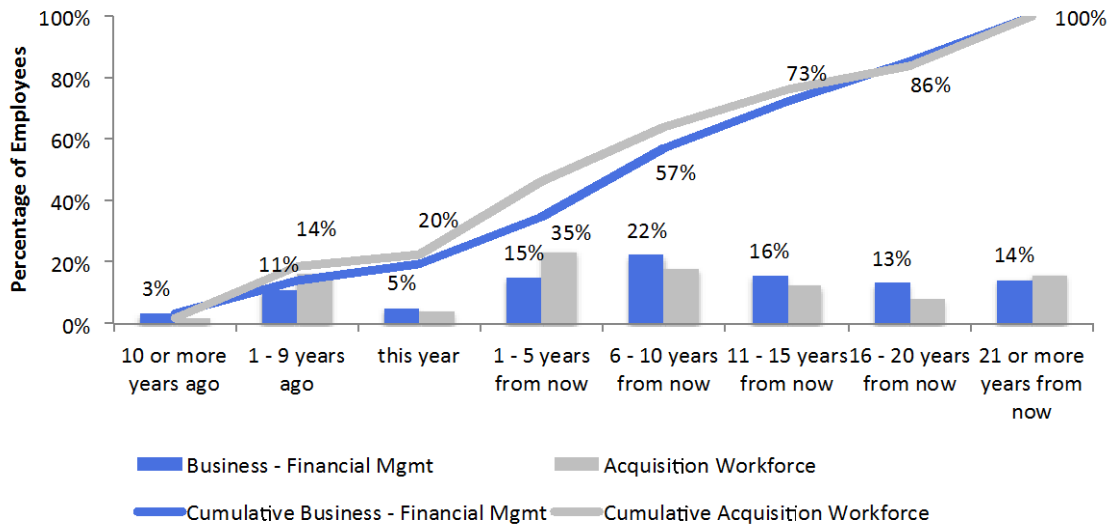
Exhibit 7.5.3 shows the retirement eligibility profile for the acquisition employees in the Business - Financial Management profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Approximately 20 percent of employees in this profession will be eligible for retirement by the end of this calendar year, 2 percent lower than for the overall acquisition workforce.

<sup>12</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).



### Exhibit 7.5.3

#### Business - Financial Management Retirement Eligibility



Typical job roles for acquisition employees in this profession include:

- Cost Analyst/Estimator
- Business Manager
- Financial Analyst

Typical job series in this profession include:

- 500 series – Accounting and Budget Group
- 1500 series – Mathematics and Statistics Group

#### Critical Competencies

The table below lists requisite competencies for the Business - Financial Management profession. These competencies were validated in FY 2012 and enhanced with performance indicators at basic, intermediate and advanced levels of performance.

Business - Financial Management Competencies	
<b>Technical:</b> <ul style="list-style-type: none"> <li>• Budget Development and Justification</li> <li>• Budget Execution and Funds Control</li> <li>• Performance Measurement and Analysis</li> <li>• Data Collection Analysis and Reporting</li> <li>• Internal Control, Audit and Review</li> <li>• Planning and Forecasting</li> <li>• Procurement</li> </ul>	<b>Non-Technical:</b> <ul style="list-style-type: none"> <li>• Agility</li> <li>• Business Acumen</li> <li>• Communications</li> <li>• Customer and Stakeholder Management</li> <li>• Interpersonal Relations and Influence</li> <li>• Problem Solving and Decision Making</li> <li>• Teamwork and Collaboration</li> </ul>

Because of its importance to the profession, a competency model was developed specifically for Cost Estimating.

Cost Estimating Competencies	
<b>Technical:</b> <ul style="list-style-type: none"> <li>• Acquisition and Contracts</li> <li>• Data Collection and Analysis</li> <li>• Financial Analysis</li> <li>• Financial Management</li> <li>• Investment Analysis Program and Portfolio Management</li> <li>• Systems Evaluation</li> <li>• FAA Organizational Policies and Procedures</li> </ul>	<b>Non-Technical:</b> <ul style="list-style-type: none"> <li>• Agility</li> <li>• Customer Focus</li> <li>• Interpersonal Relations and Influence</li> <li>• Communication</li> <li>• Teamwork/Collaboration</li> </ul>

## Challenges

- Hiring, training and retaining personnel who can analyze and evaluate the efficacy of cost estimates to keep pace with the demands of FAA's complex, software-intensive programs.
- Keeping pace with the number of enterprise architecture decisions requiring analytical support.

## Activities in 2015

- Hired cost / price analysts at FAA's Atlantic City Technical Center through a creative approach which moved the work to where the resources reside. FAA had difficulty identifying

qualified candidates at a reasonable cost in the Washington, D.C. area so the work was moved to where candidates were available.

- Expanded the Business - Financial Management training curriculum, including development of on-line financial training for Contracting Officer's Representatives.

#### Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Build-out and enhance the Business – Financial Management community portal	Refreshed content	2nd Quarter
Continue to deliver and enhance the Cost Estimating curriculum	Training deliveries and enhancements	As required

## 7.6 CONTRACTING PROFILE

### Definition

Contracting Officers/Specialists are responsible for the processes and procedures involved in establishing and maintaining contractual relationships. This includes understanding the technical requirements, assisting with the development of the acquisition strategy, developing a procurement strategy plan, reviewing statements of work, evaluating cost estimates, determining contractor responsibility, performing administration by determining contractor compliance, negotiating cost or price or technical changes, monitoring contractor performance and approving payments. The Contracting Officer/Specialist has the specific and sole authority to bind the government by executing awards, exercising options or terminating contracts.

### Membership

In 2015 there are approximately 262 acquisition employees performing Contracting duties. Contracting professionals make up approximately 14 percent of the acquisition workforce. This profession includes employees who are primarily responsible for awarding and administering contracts.

### Years of Experience

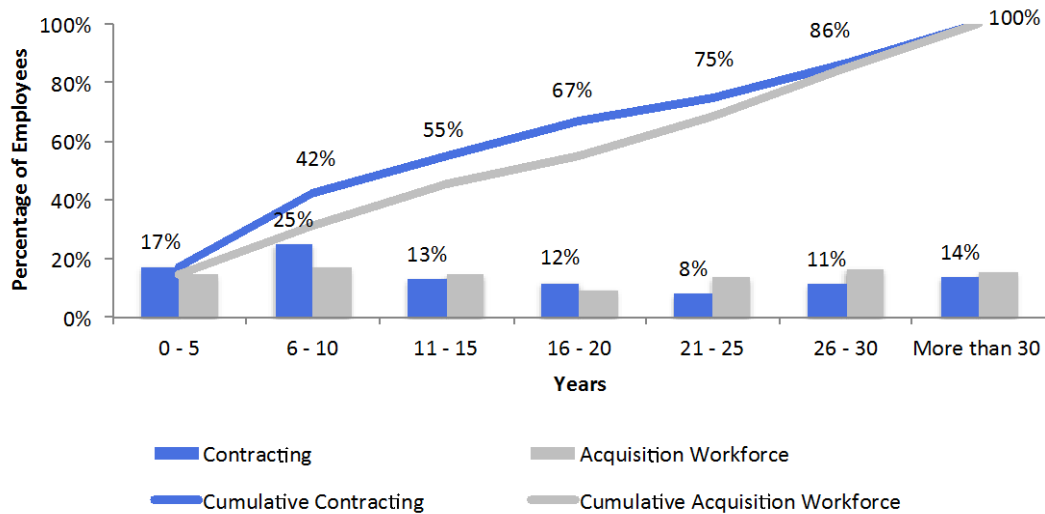
The average tenure of Contracting professionals in federal service is approximately 16 years, 2.5 years less than the average acquisition workforce professional. The distribution of years of federal service is shown in Exhibit 7.6.1. As shown in the exhibit, Contracting professionals have higher representation than the overall acquisition workforce in the lower federal experience (0 - 10 years) range. With approximately 20 percent of its contracting employees having five or fewer years experience, FAA has a lower percentage of less experienced employees than the government average (28 percent<sup>13</sup>).

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<sup>13</sup> "2013 annual review of government contracting", National Contract Management Association and Bloomberg Government.

## Exhibit 7.6.1

### Contracting Federal Service

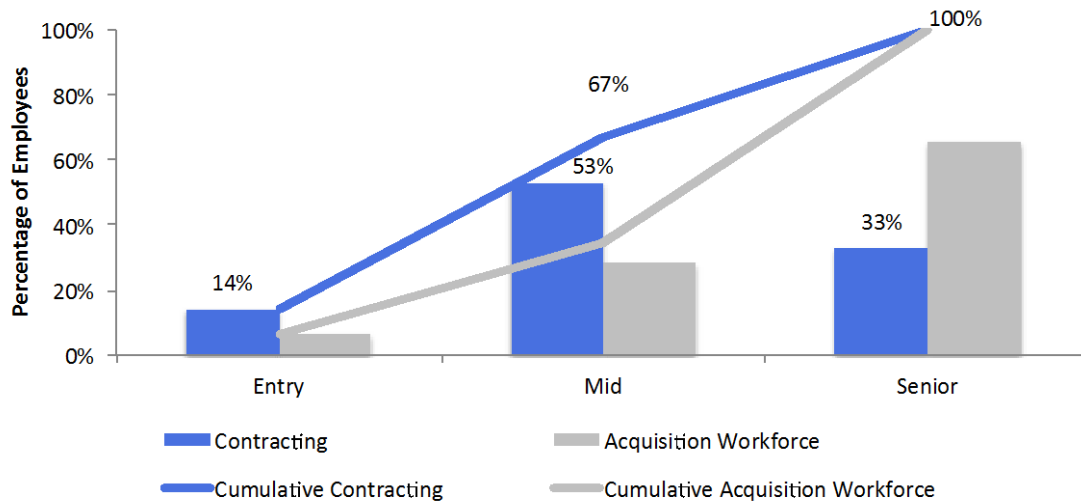


## Career Levels<sup>14</sup>

Exhibit 7.6.2 shows the career level distribution for the Contracting profession. Employees in this profession are spread across all three career levels, with almost 53 percent at the Mid level.

## Exhibit 7.6.2

### Contracting Career Levels



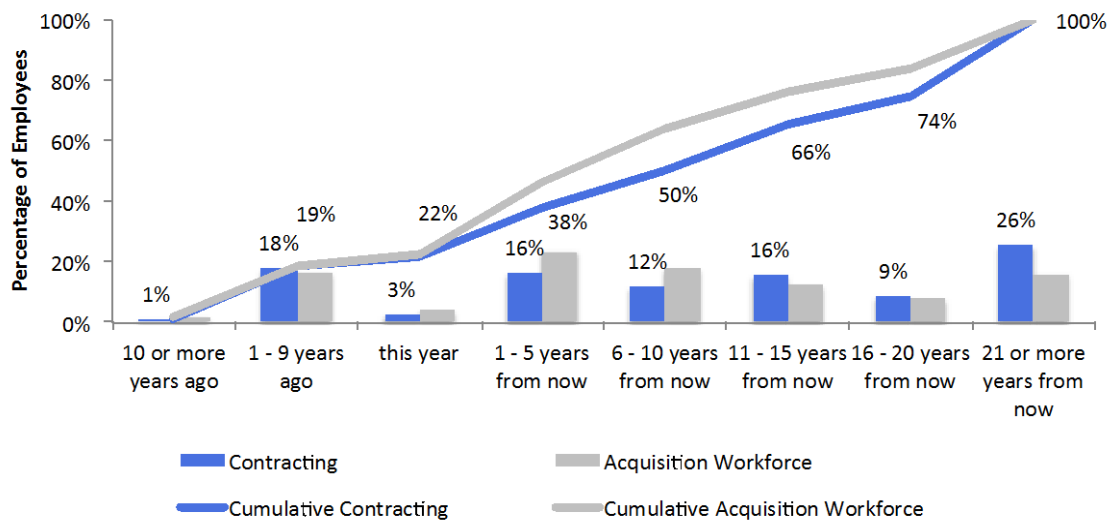
<sup>14</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

## Retirement Eligibility

Exhibit 7.6.3 shows the retirement eligibility profile for the acquisition employees in the contracting profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Twenty-two percent of contracting professionals will be eligible to retire by the end of this calendar year, consistent with the overall acquisition workforce.

### Exhibit 7.6.3

#### Contracting Retirement Eligibility



Typical job roles for acquisition employees in this profession include:

- Contracting Officer
- Contracting Specialist
- Cost Price Analyst

Typical job series in this profession include:

- 1102 – Contracting Officer/Specialist

## Critical Competencies

The following competencies were developed in collaboration with the Contracting community and the Acquisition Workforce Council.

Contracting Technical Competencies		
Acquisition Phase: Acquisition Planning	Acquisition Phase: Contract Formation	Acquisition Phase: Contract Administration/Management
<ul style="list-style-type: none"> <li>• Acquisition Strategy Development Defining Contractual/ Business Relationships</li> <li>• Defining Government Requirements in Commercial/Non-Commercial Terms Defining Requirements</li> <li>• Managing Competition</li> <li>• Market Research</li> <li>• Performance Based Acquisition Procurement Planning</li> <li>• Small Business and Preference Program Participation</li> </ul>	<ul style="list-style-type: none"> <li>• Contract Award</li> <li>• Detailed Proposal Evaluation Skills Negotiation</li> <li>• Proposal Analysis and Evaluation Solicitation of Offers</li> </ul>	<ul style="list-style-type: none"> <li>• Financial Management Performance Management</li> <li>• Requirements/ Contract Management</li> <li>• Dispute Resolution, Termination, and Closeout</li> </ul>
Contracting Non-Technical Competencies		
<ul style="list-style-type: none"> <li>• Agility</li> <li>• Business Acumen</li> <li>• Communications</li> <li>• Customer and Stakeholder Management</li> <li>• Problem Solving and Decision Making Teamwork and Collaboration</li> </ul>		

## Certification

The Contracting certification program supports certification of professionals at three distinct levels: Entry, Mid and Senior. These levels reflect the increasing responsibility and capability required of the Contracting Officer/Specialist as acquisitions become larger and more complex.

Certification requirements were updated in FY 2015. Certification requirements are met through a combination of factors, which include experience in the profession, training (both internal and external to FAA) and demonstrated proficiency in the Contracting competencies.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The Contracting Officer/Specialist certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- Staffing and retention of contracting positions is difficult due to high demand across all of federal government.
- Ensuring that Contracting professionals continue to have access to appropriate continuous learning opportunities in an environment of limited budget and demanding workload.

## Activities in 2015

- Enhanced Contracting certification requirements to align with changes in the Federal Acquisition Institute's FAC-C certification program.
- The Contracting organization assessed, and adjusted, how it organizes work and staffing, to improve alignment with internal customers, centralize and leverage areas of expertise, and take advantage of geographic areas with strong candidate pools where there is successful experience recruiting highly capable talent.
- Improved recruitment and retention, including using Term Appointments to quickly fill Contracting Officer/Specialist positions with personnel who have extensive industry contracting experience.
- Provided training, industry certification and graduate level programs for Contracting professionals.
- Published new and enhanced career development tools, including the *Contracting Career Planning, Development and Resource Guide*, the *Competency Experience Checklist* and the *Development Activities Guide*, to support competency knowledge and skill development and evaluation.



- Continued to enhance the Contracting community of practice web portal to provide guidance and tools to support career development, and provide links to certification requirements and applications.
- Created a monthly Leadership Video Series for the Contracting community.

#### Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Monitor Government-wide initiatives that could impact the certification requirements for Contracting Officers/Specialists (1102 series). Impacts will be reviewed to determine if changes to FAA's contracting certification program are required	Status reports to the Acquisition Workforce Council, as needed	Monthly
Review and enhance curriculum	Robust curriculum	Annually
Ensure employees meet the certification requirements for their position	Monthly metrics provided to the Acquisition Workforce Council	Monthly
Migrate to the government-wide acquisition training and certification system, FAITAS	CO/S workforce registered in FAITAS	1st Quarter
Increase offerings of creative ways to gain continuous learning opportunities	Leadership forums and activities	Quarterly
Build-out and enhance the Contracting community portal	Refreshed content	Quarterly

## 7.7 REALTY SPECIALIST PROFILE

### Definition

The Realty Specialist profession is comprised of Real Estate Contracting Officers/Specialists (RECO/S) who are responsible for acquiring real estate, utilities and land. Acting on FAA's behalf, they prepare and execute contractual agreements, lease land and space to support NAS operations, secure title to land or buildings through purchase or condemnation proceedings, and prepare documents to transfer ownership between the FAA and outside parties both public and private.

### Membership

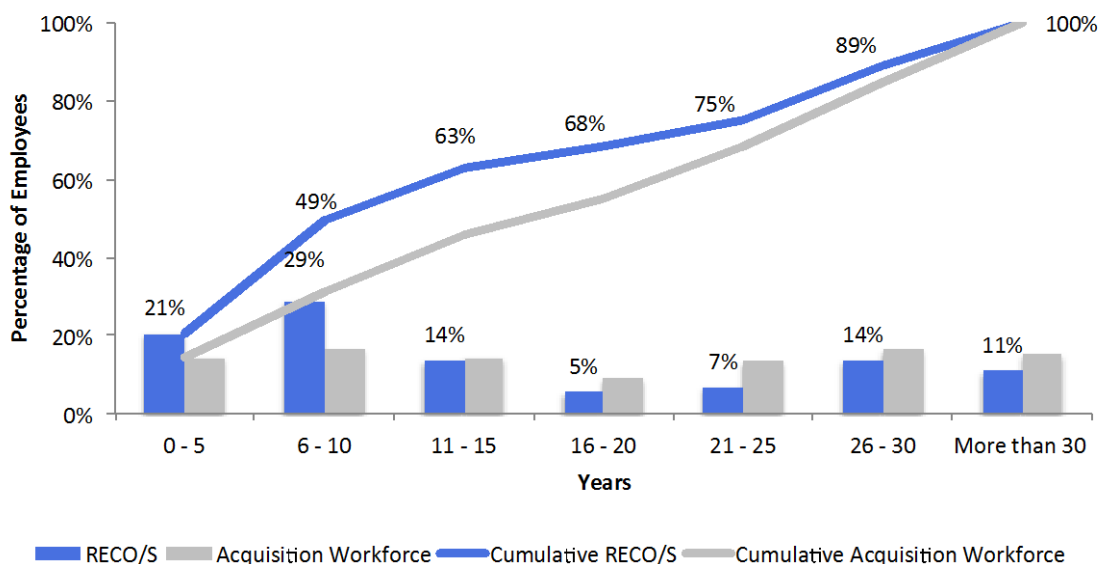
In 2015 there are 73 RECO/S professionals. These employees are geographically dispersed, with the majority working in College Park, Georgia followed by Renton, Washington and Ft. Worth, Texas. Realty Specialist professionals make up approximately 4 percent of the acquisition workforce.

### Years of Experience

The average tenure of RECO/S professionals in federal service is approximately 15 years, four years less than the overall workforce average. The distribution of years of federal service is shown below in Exhibit 7.7.1. As shown in the exhibit, RECO/S professionals have a higher representation than the overall acquisition workforce at the lower federal experience (0 - 10 years) range.

### Exhibit 7.7.1

Realty Specialist Federal Service

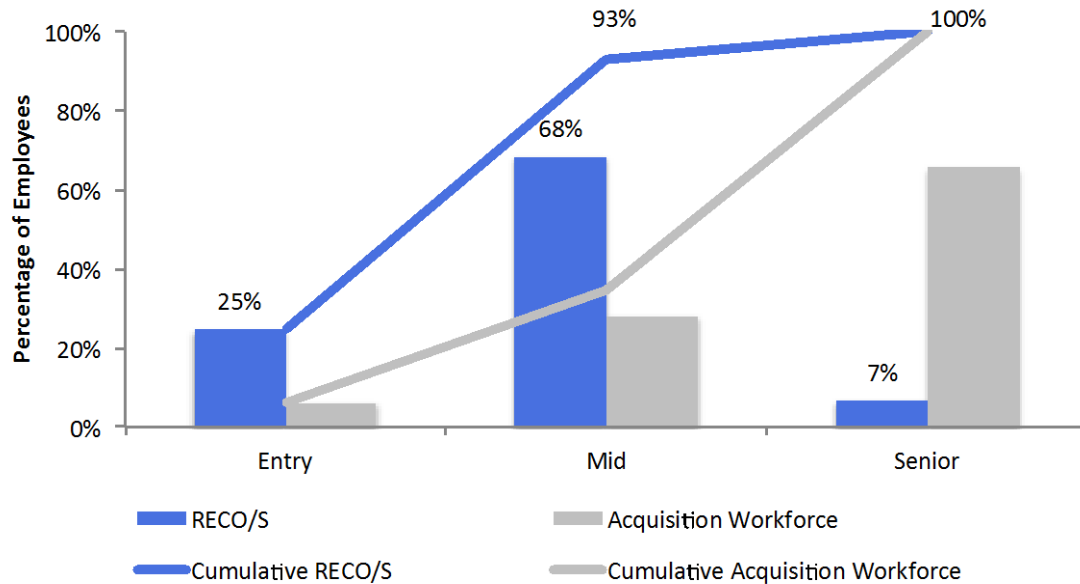


## Career Levels<sup>15</sup>

Exhibit 7.7.2 shows the career level distribution for RECO/S professionals. Employees in this profession are primarily at the Entry and Mid levels.

### Exhibit 7.7.2

Realty Specialist Career Levels



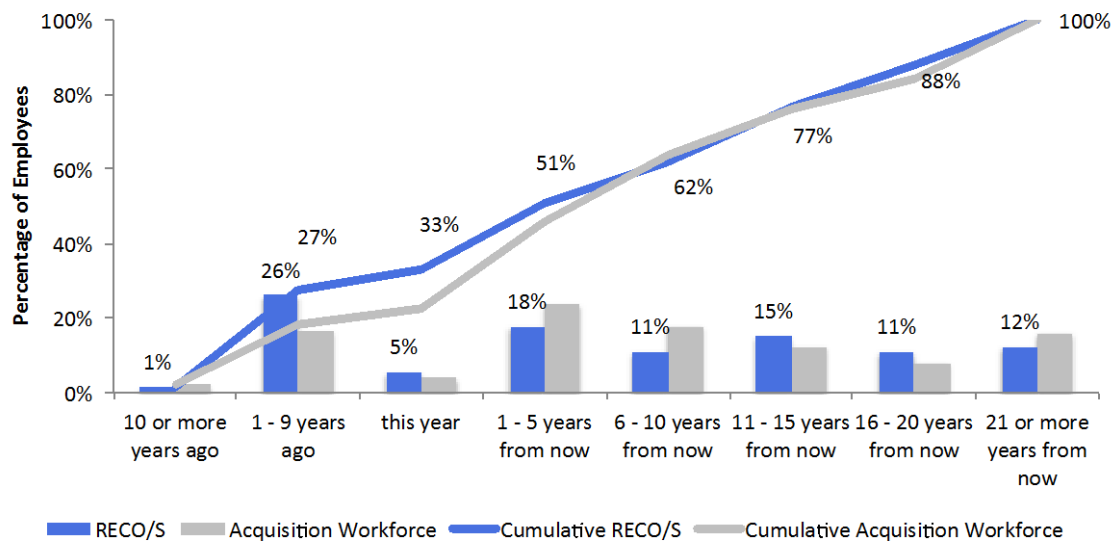
## Retirement Eligibility

Exhibit 7.7.3 shows the retirement eligibility profile for these acquisition employees. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Fifty-one percent of current RECO/S professionals will be eligible for retirement in 5 years, higher than the overall acquisition workforce.

<sup>15</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

### Exhibit 7.7.3

#### Realty Specialist Retirement Eligibility



Typical job roles for acquisition employees in this profession include:

- Real Estate Contracting Officer/Specialist (RECO/S)

Typical job series in this profession include:

- 1170 series – Real Estate Contracting Officer/Specialist (RECO/S) and Real Estate Supervisors/Managers

#### Critical Competencies

The RECO/S competencies were revised and validated in 2013 and updated in 2015. They consist of:

Realty Specialist Competencies	
<b>Technical:</b> <ul style="list-style-type: none"> <li>• Requirements Development and Management</li> <li>• Land Acquisition</li> <li>• Space Acquisition</li> <li>• Purchase</li> <li>• Condemnation</li> <li>• Contract and Property Management</li> <li>• Disposal of Real Property</li> <li>• Utilities Contracting</li> <li>• Documentation and Quality Assurance</li> <li>• Budget and Finance</li> <li>• Negotiation</li> <li>• Project Management</li> </ul>	<b>Non-Technical:</b> <ul style="list-style-type: none"> <li>• Agility</li> <li>• Communications</li> <li>• Customer and Stakeholder Management</li> <li>• Knowledge and Development</li> <li>• Personal Accountability</li> <li>• Problem Detection and Resolution</li> <li>• Teamwork and Collaboration</li> </ul>

## Certification

The RECO/S certification program supports certification of professionals at three distinct levels: Entry, Mid, and Senior. These levels reflect the increasing responsibility and capability required of the Real Estate Contracting Officer/Specialist as real property acquisitions become larger and more complex.

Certification requirements are met through a combination of factors, which include experience in the profession, training (both internal and external to FAA) and demonstrated proficiency in the RECO/S competencies.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The RECO/S certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- Developing RECO/S professionals to support FAA Real Property acquisition, management, and disposal takes a combination of detailed training tailored to the FAA as well as on-the-job developmental experiences.
- Developing and training new hires will require additional focus as experienced RECO/S

professionals retire and business needs require increased resources.

- The growing complexity of real property acquisitions requires skilled, experienced RECO/S professionals, which increases the importance of ensuring that they continue to develop their competencies and have access to appropriate continuous learning opportunities in an environment of limited budget and demanding workload.

## Activities in 2015

- Successfully launched the new RECO/S 3-level certification program.
- Exceeded the FY 2015 business goal of certifying 50 percent of RECO/S professionals; FAA is continuing to certify the remaining professionals.
- Developed and delivered the FAA Real Estate Policy and Guidance course. This new online course offers core FAA real estate policy training to both RECO/S professionals new to the role as well as more senior professionals who may need a refresher.
- Updated and delivered the FAA Advanced Real Estate Course, and designed, developed and deployed the ABAAS environmental group.
- Offered Techniques for Federal Real Property Leasing, Basic Appraisal and Yellow Book Condemnation commercial-off-the-shelf (COTS) courses.
- Published new and enhanced career development tools, including the *RECO/S Career Planning, Development and Resource Guide*, the *Competency Experience Checklist* and the *Development Activities Guide* to support competency knowledge and skill development and evaluation.
- Continued to enhance the RECO/S community of practice web portal to provide guidance and tools to support career development, and provide links to certification requirements and applications.

## Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Offer the following COTs courses: <ul style="list-style-type: none"> <li>• Project management</li> <li>• Acquisition Law</li> <li>• Federal Real Property Lease Law</li> </ul>	Offered Courses	Various Quarters
Update the Space Project Management Course	Design and Delivery of Course Materials	4th Quarter

Initiative	Deliverable	Planned Completion
Update the FAA Legal Real Estate course	Updated course materials	2nd Quarter
Update, maintain and train Realty Specialists on AMS Real Property Policy and Guidance	Updated AMS content	4th Quarter
Continue to ensure employees meet the certification requirements for their position	Monthly metrics provided to the Acquisition Workforce Council	Monthly

## 7.8 CONTRACTING OFFICER'S REPRESENTATIVE (COR) PROFILE

### Definition

Contracting Officer's Representatives (CORs) help resolve technical issues, give technical direction to the contractor and interpret technical processes and procedures for the Contracting Officer/Specialist. The functions include interpreting technical requirements, assisting with the acquisition strategy, assisting in the development of the statement of work, generating government cost estimates, assisting in the negotiation of costs or price of technical requirements, monitoring contractor performance, reviewing and accepting services, supplies and equipment, invoice reconciliation and recommending payments.

### Membership

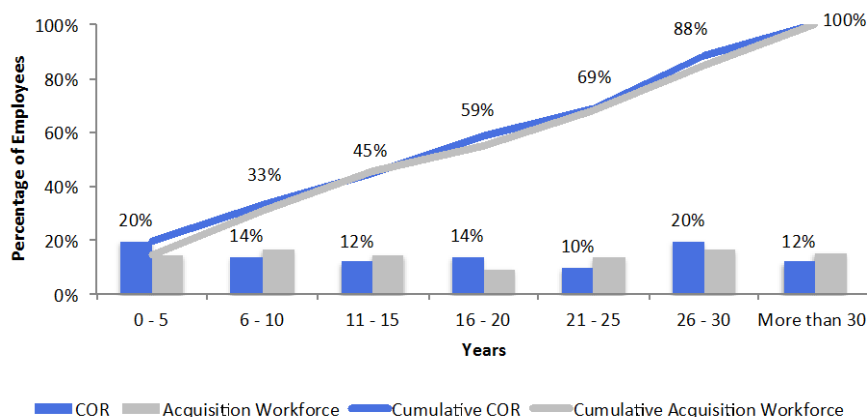
In 2015 there are approximately 51 FAA employees performing COR duties as their primary responsibility on FAA's Capital Investment Plan (CIP) acquisition programs. These full-time CORs make up approximately three percent of the acquisition workforce membership. Over two thousand (2,000) other employees across FAA's lines of business and staff offices perform COR responsibilities for other types of procurements in addition to the CORs providing full-time support to CIP acquisition programs. The number of employees performing COR duties changes constantly as contracts begin and end. CORs perform critical acquisition and technical functions, and Contracting Officers/Specialists rely on them to ensure that contracts are managed properly to meet mission needs. CORs are designated and authorized in writing by the Contracting Officer/Specialist to perform prescribed administrative and/or technical functions on a contract.

### Years of Experience

The average tenure of COR professionals in federal service is over 17 years. The distribution of tenure is shown in Exhibit 7.8.1.

### Exhibit 7.8.1

#### COR Federal Service



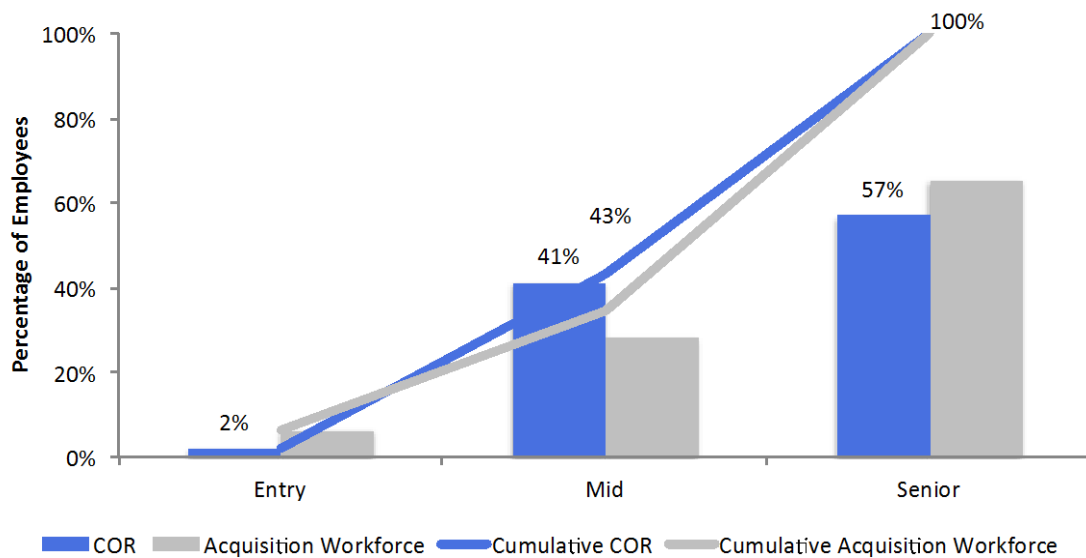


## Career Levels<sup>16</sup>

Exhibit 7.8.2 shows the career level distribution for the COR profession. Employees in this profession are spread primarily across the Mid and Senior career levels, with 57 percent at the Senior level.

### Exhibit 7.8.2

#### COR Career Levels



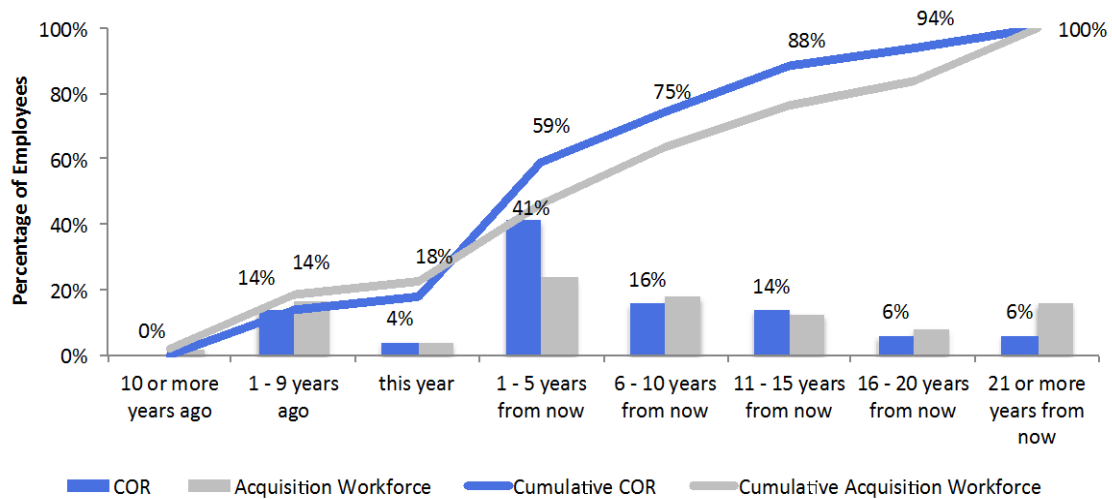
## Retirement Eligibility

Exhibit 7.8.3 shows the retirement eligibility profile for the acquisition employees in the COR profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Eighteen percent of COR professionals are eligible to retire by the end of this year.

<sup>16</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

## Exhibit 7.8.3

### COR Retirement Eligibility



## Critical Competencies

The table below lists the requisite competencies for CORs.

Contracting Officer's Representative	
<b>Technical:</b> <ul style="list-style-type: none"> <li>• Acquisition Planning</li> <li>• Market Research (Understanding the Marketplace)</li> <li>• Defining Government Requirements</li> <li>• Effective Pre-Award Communication</li> <li>• Proposal Evaluation</li> <li>• Contract Negotiation</li> <li>• Contract Administration Management</li> <li>• Effective Inspection and Acceptance</li> <li>• Contract Quality Assurance &amp; Evaluation</li> <li>• Contract Closeout</li> <li>• Contract Reporting</li> <li>• Business Acumen</li> </ul>	<b>Non-Technical:</b> <ul style="list-style-type: none"> <li>• Agility</li> <li>• Communications</li> <li>• Customer and Stakeholder Management</li> <li>• Problem Solving and Decision-making</li> <li>• Teamwork and Collaboration</li> </ul>

## Certification

In FY 2012, FAA adopted COR certification changes proposed by the Federal Acquisition Institute. The COR certification program supports certification of professionals at three distinct levels based on the complexity of the specific contract or task order being supported by the COR. These levels reflect the increasing responsibility and capability required of the COR as contracts and task orders become more complex.

Certification requirements were updated in FY 2015. Certification requirements are met through a combination of factors, which include experience in the profession, training (both internal and external to FAA) and demonstrated proficiency in the contracting competencies.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The COR certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- The complexity of acquisitions on large, integrated programs requires skilled, experienced CORs.
- CORs need a better understanding of contracting to ensure successful administration of contracts (including bounds of authority and accountability).
- Because the COR is usually a collateral role, identifying CORs and tracking compliance with training requirements can be challenging. COR lists must be revalidated on a continual basis for accuracy.

## Activities in 2015

- Met the FY 2015 goal of increasing by 5%, from the FY 2014 baseline, the number of FAA CORs that attain COR certification.
- Enhanced COR certification requirements to align with changes in the Federal Acquisition Institute's FAC-COR certification program.
- Certified over 400 employees in the COR profession, for a total of over 1,900 certified FAA CORs.
- Published new and enhanced career development tools, including the *COR Career Planning, Development and Resource Guide*, the *Competency Experience Checklist* and the *Development Activities Guide*, to support competency knowledge and skill development and evaluation.
- Continued to enhance the COR community of practice web portal to provide guidance and tools to support career development, and provide links to certification requirements and applications.

## Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Continue to build-out and enhance the COR community portal	Refreshed content	Quarterly
Review and enhance curriculum	Robust curriculum	Annually
Ensure employees meet the certification requirements for their position	Monthly metrics provided to the Acquisition Workforce Council	Monthly
Monitor Government-wide initiatives that could impact the certification requirements for CORs. Impacts will be reviewed to determine if changes to FAA's contracting certification program are required	Status reports to the Acquisition Workforce Council, as needed	Monthly
Migrate to the government-wide acquisition training and certification system, FAITAS	COR workforce registered in FAITAS	1st Quarter

## 7.9 ACQUISITION LAW PROFILE

### Definition

Acquisition Law professionals provide legal advice regarding all aspects of contract formation and administration, including intellectual property, antitrust, bankruptcy, debarment, conflict of interest, real estate, mergers, security, export control, procurement integrity, property disposal and fiscal and socio-economic laws affecting acquisitions. Acquisition attorneys represent agency acquisition teams in the agency's internal dispute resolution process and also represent FAA with the Department of Justice in federal court litigation.

### Membership

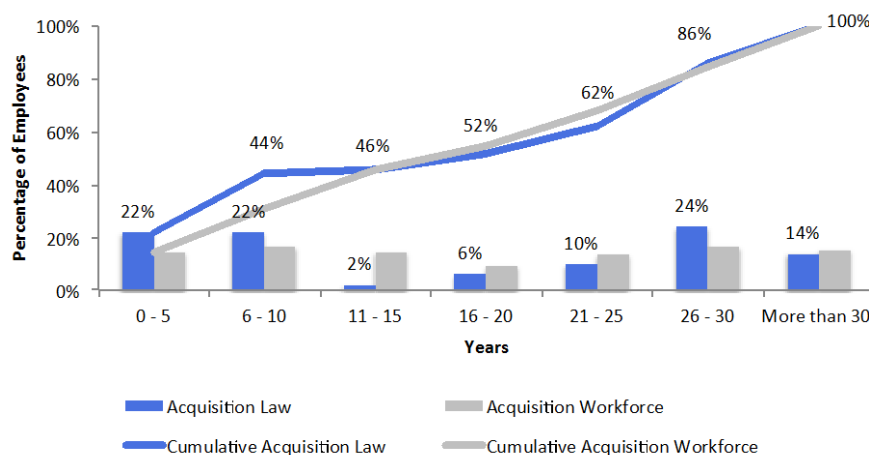
In 2015 there are 50 acquisition attorneys in this acquisition profession. At FAA headquarters, the work is dedicated; in the Service Centers and most regions, at least one person is recognized as an acquisition attorney, although he or she may perform additional duties. The Technical Center and the Aeronautical Center also have dedicated acquisition attorneys. Acquisition attorneys are distributed proportionately across the nine regions and Technical and Aeronautical Centers; almost one-half of acquisition attorneys are located at FAA's Washington, DC headquarters.

### Years of Experience

The average tenure of Acquisition Law professionals in federal service is 17 years. The distribution of years of federal service is shown below in Exhibit 7.9.1. Twenty-two percent of Acquisition Law professionals have 5 or fewer years of federal service and almost half have less than 15 years of federal service. Acquisition attorneys tend to stay with programs and work a portfolio, which may change somewhat over time. On FAA acquisition programs, the relationship with the program office is very important.

### Exhibit 7.9.1

#### Acquisition Law Federal Service

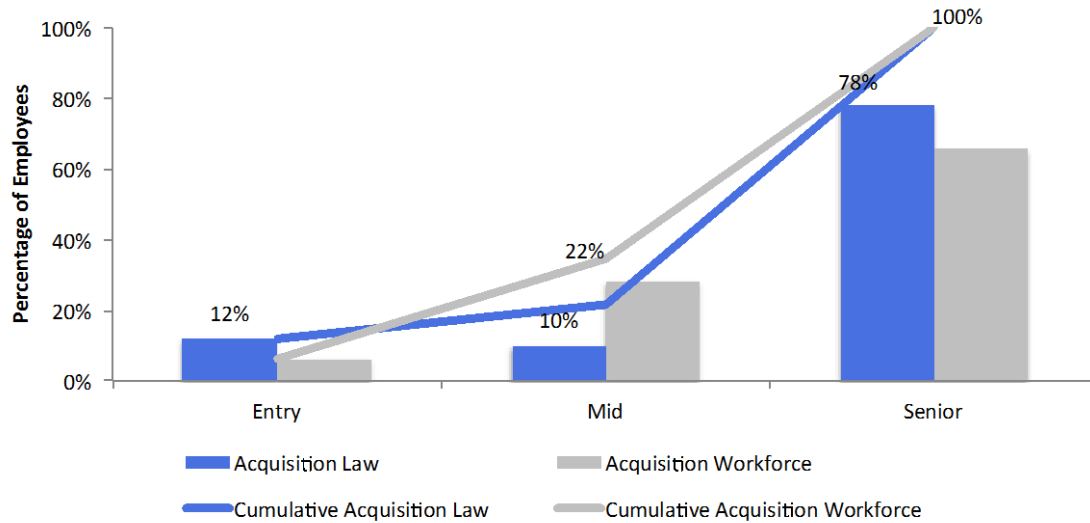


## Career Levels<sup>17</sup>

Exhibit 7.9.2 shows the career level distribution for the Acquisition Law profession. Employees in this profession are predominantly experienced, higher-grade personnel, with 78 percent at the Senior level.

### Exhibit 7.9.2

Acquisition Law Career Levels



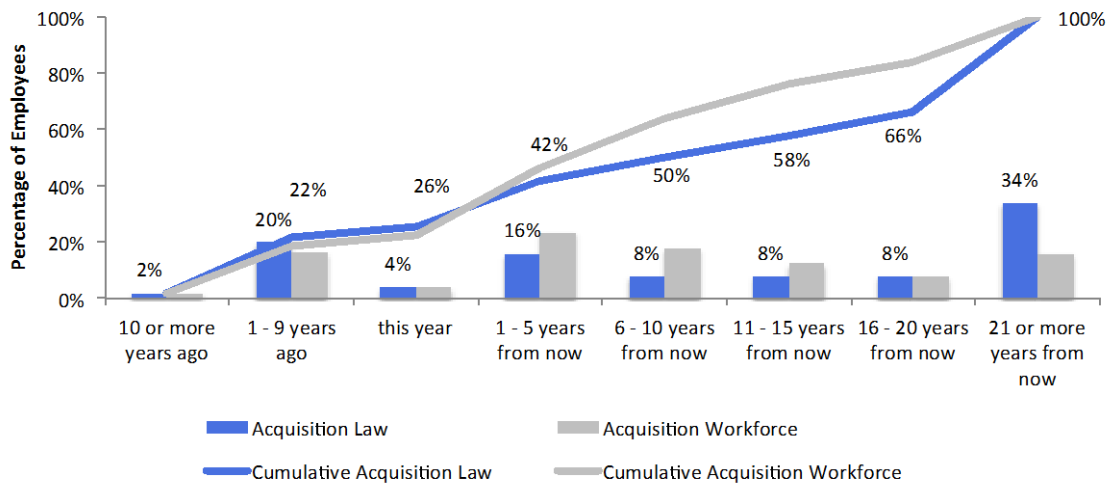
## Retirement Eligibility

Exhibit 7.9.3 shows the retirement eligibility profile for the acquisition employees in the Acquisition Law profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Cumulatively, 26 percent of Acquisition Law professionals are eligible for retirement by the end of this calendar year, 4 percent higher than the overall acquisition workforce.

<sup>17</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

### Exhibit 7.9.3

#### Acquisition Law Retirement Eligibility



Typical job roles for acquisition employees in this profession include:

- Acquisition Attorney

Typical job series in this profession include:

- 0905 – General Attorney

#### Critical Competencies

A competency model has not been developed for Acquisition Attorneys. FAA conducted a benchmarking study in 2010 and did not find any organization using a formal competency model for Acquisition Attorneys.

Acquisition Attorneys in the agency do not attend a formal, lockstep training program. However, there are courses that have been identified as valuable for new Acquisition Attorneys that include a mix of in-agency and out-of-agency training. Additional employee development may occur through internships, mentoring, and conference attendance. Some Acquisition Attorneys accept formal details on an acquisition program to gain additional experience from an agency perspective. Through the course of their careers, Acquisition Attorneys will be asked to teach classes to peers in their areas of expertise.

#### Challenges

- The complexity of acquisitions requires highly skilled Acquisition Attorneys.
- FAA's uniquely flexible Acquisition Management System requires a learning curve for seasoned attorneys recruited from other agencies.

## 7.10 INTEGRATED LOGISTICS SUPPORT SPECIALIST PROFILE

### Definition

Integrated Logistics Support (ILS) is the profession that plans, establishes, and maintains an ILS system for the life cycle of FAA products and services. ILS works by planning for and managing the interdependencies among the nine Logistics elements: Maintenance Planning; Supply Support; Training, Training Support, and Personnel Skills; Computer Resources Support; Maintenance Support Facilities; Packaging, Handling, Storage, and Transportation; Technical Data; Direct Work Maintenance Staffing; and Support Equipment.

### Membership

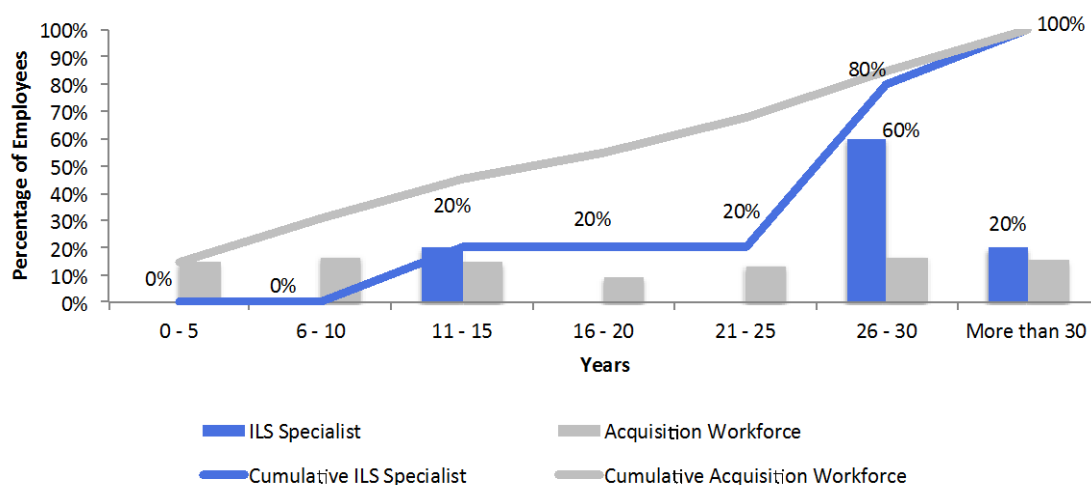
In 2015, 5 employees in FAA have primary responsibility for Integrated Logistics Support on acquisition programs. Logistics Specialists are responsible for supporting and advising Acquisition Program Managers or Service Team Leaders to ensure the successful integration of logistics support elements throughout the Acquisition Management System (AMS) life cycle. Some of these individuals are also responsible for working with requiring offices to develop contract specifications for projects to improve, expand, and extend the service life of existing programs.

### Years of Experience

The average tenure of Logistics professionals in federal service is 27 years, which is 9 years more than the average acquisition employee. Over 80 percent of Logisticians have 26 or more years of federal service. The distribution of years of federal service is shown below in Exhibit 7.10.1.

### Exhibit 7.10.1

ILS Specialist Federal Service



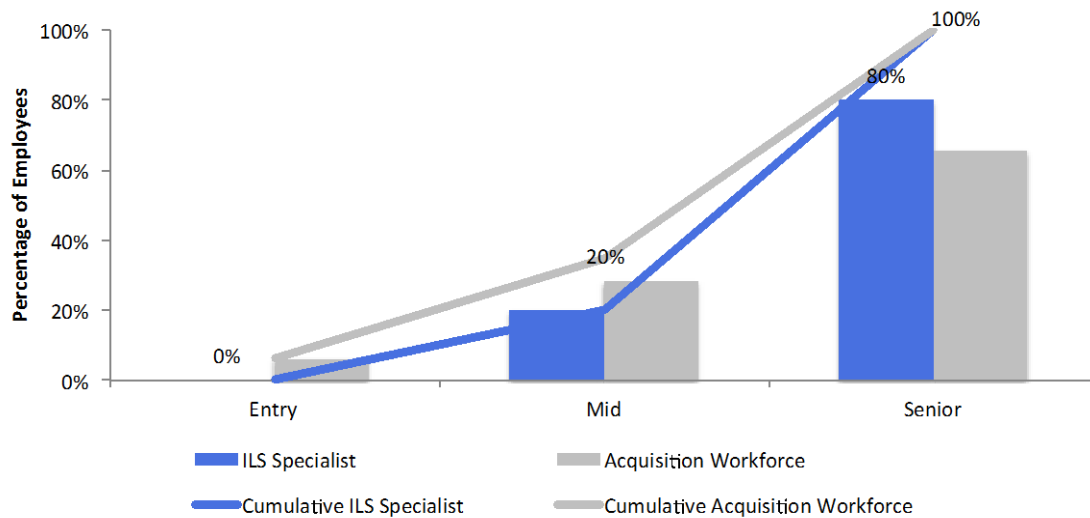


## Career Levels<sup>18</sup>

Exhibit 7.10.2 shows the career level distribution for the ILS profession. Sixty-five percent of employees in this profession are at the Senior level.

### Exhibit 7.10.2

ILS Specialist Career Levels



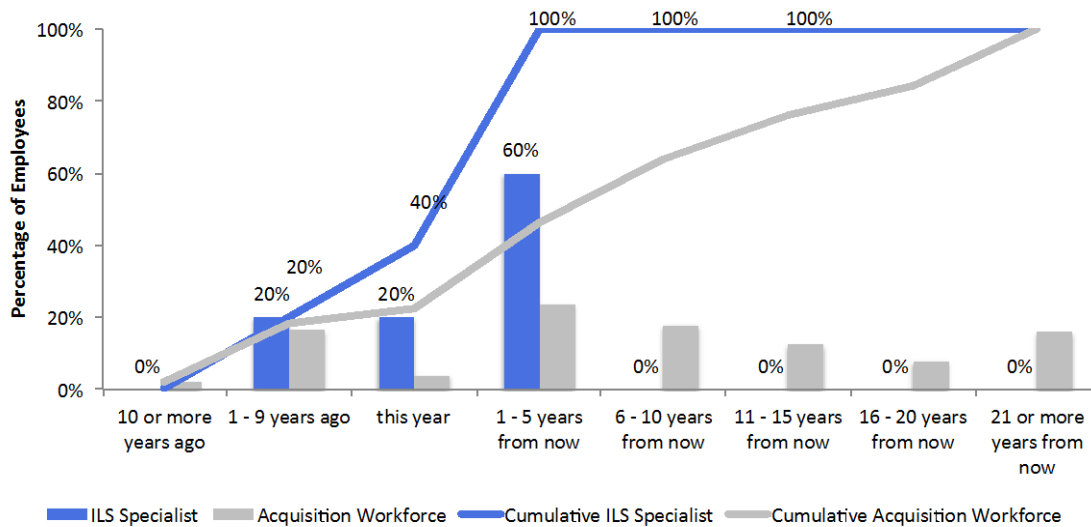
## Retirement Eligibility

Exhibit 7.10.3 shows the retirement eligibility profile for the acquisition employees in the Logistics profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Fifty percent of ILS professionals are eligible to retire this year versus 22 percent in the overall acquisition workforce; 100 percent are eligible to retire within 5 years.

<sup>18</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

### Exhibit 7.10.3

#### ILS Specialist Retirement Eligibility



Typical job roles for acquisition employees in this profession include:

- Logistics Element Specialist/Manager
- Integrated Logistics Support Specialist/Manager
- Logistics Management Specialist

Typical job series in this profession include:

- 346 – Logistics Management Specialist

#### Critical Competencies

Integrated Logistics Support Specialist (ILS)	
<b>Technical:</b> <ul style="list-style-type: none"> <li>• Contracting and Acquisition</li> <li>• Design for Supportability</li> <li>• ILS Planning</li> <li>• Product Support and Sustainment</li> <li>• Project Management</li> </ul>	<b>Non-Technical:</b> <ul style="list-style-type: none"> <li>• Agility</li> <li>• Communications</li> <li>• Customer and Stakeholder Management</li> <li>• Problem Solving and Decision-making</li> <li>• Teamwork and Collaboration</li> </ul>

## Certification

The Integrated Logistics Support certification program supports certification of professionals at three distinct levels: Entry, Mid and Senior. These levels reflect the increasing responsibility and capability required of the Integrated Logistics Specialist as programs become larger, more complex, and more highly integrated with other programs.

Certification requirements are met through a combination of factors, which include experience in the profession, training (both internal and external to FAA) and external certification equivalencies. All acquisition certifications are competency-based.

To maintain FAA certification, individuals must continue to develop skills and capabilities as measured through continuous learning points.

The Integrated Logistics Support certification policy is available in FAA's Acquisition Management System (AMS) Policy Section 5.0, at <http://fast.faa.gov/AcquisitionCareerManagement.cfm>.

## Challenges

- Expanding Program / Project focus on Integrated Logistics Support during the initial phases of the AMS lifecycle to reduce the total cost of ownership.
- Expanding focus on cost savings measures for sustaining existing FAA projects, programs, facilities and services.
- Managing costs and risks associated with the lifecycle management of FAA projects, programs, facilities and services.
- Supporting the career growth or development of members of the Integrated Logistics Support profession.
- Developing junior level ILS professionals as more experienced professionals leave the workforce.

## Activities in 2015

- Continued to build-out and enhance the ILS community portal to provide guidance and tools to support career development, and provide links to certification requirements and applications.
- Continued to ensure employees maintain certification requirements.
- Piloted an ILS mentoring program involving senior level professionals to mentor prospective ILS professionals.
- Created a monthly Leadership Video Series for the ILS community.
- Published new and enhanced career development tools, including the *ILS Career Planning, Development and Resource Guide*, the *Competency Experience Checklist* and the *Development Activities Guide*, to support competency knowledge and skill development and evaluation.

## Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Build-out and enhance the ILS community portal	Refreshed content	Quarterly
Review and enhance curriculum	Robust curriculum	Annually
Outreach to improve and stimulate the developmental interests of the ILS community	Increased volume of certifications	Semi-Annually
Monitor Government-wide initiatives that could impact the certification requirements for ILS. Impacts will be reviewed to determine if changes to FAA's contracting certification program are required	Status reports to the Acquisition Workforce Council, as needed	Monthly

## 7.11 SPECIALIZED SUPPORT PROFILE

### Definition

Professionals in the specialized support profession are typically NAS or acquisition subject matter experts. They can include acquisition quality assurance officers, safety engineers, information system specialists, air traffic specialists, contract support specialists, and acquisition policy, development and training experts.

### Membership

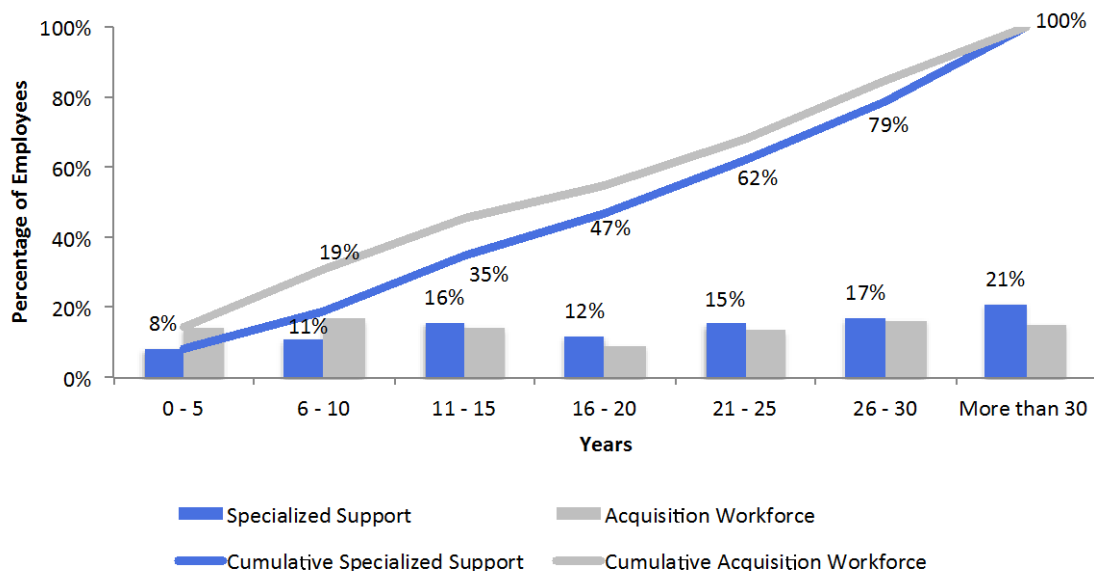
In 2015 there are approximately 229 employees in the Specialized Support category of professionals supporting acquisition programs, or 13 percent of the acquisition workforce.

### Years of Experience

The average tenure of Specialized Support professionals in federal service is over 21 years, 3 years more than the average acquisition employee. Almost 60 percent of Specialized Support professionals have 21 or more years of federal service. The distribution of years of federal service is shown below in Exhibit 7.11.1.

### Exhibit 7.11.1

Specialized Support Federal Service

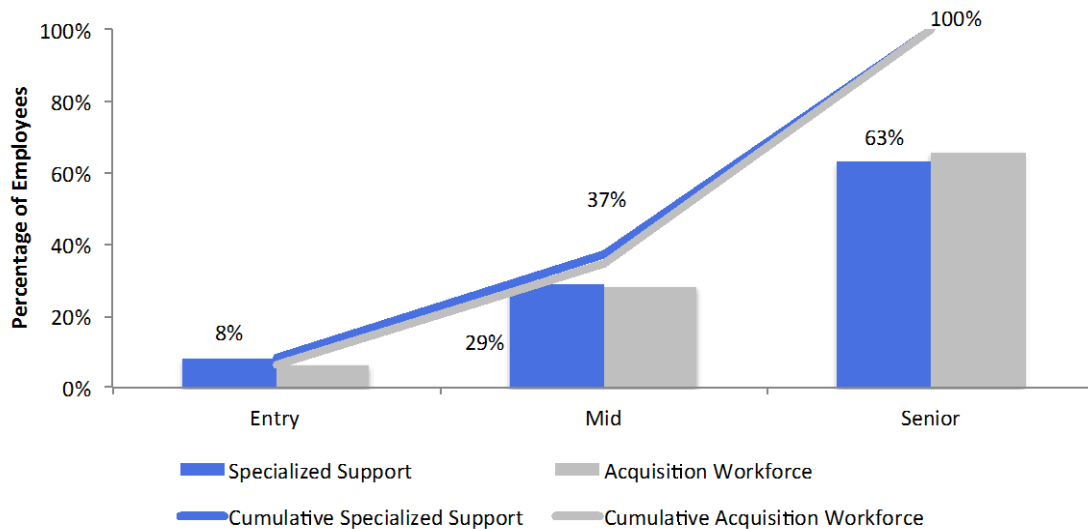


## Career Levels<sup>19</sup>

Exhibit 7.11.2 shows the career level distribution for the Specialized Support profession. Sixty-three percent of employees in this profession are at the Senior level.

### Exhibit 7.11.2

Specialized Support Career Levels



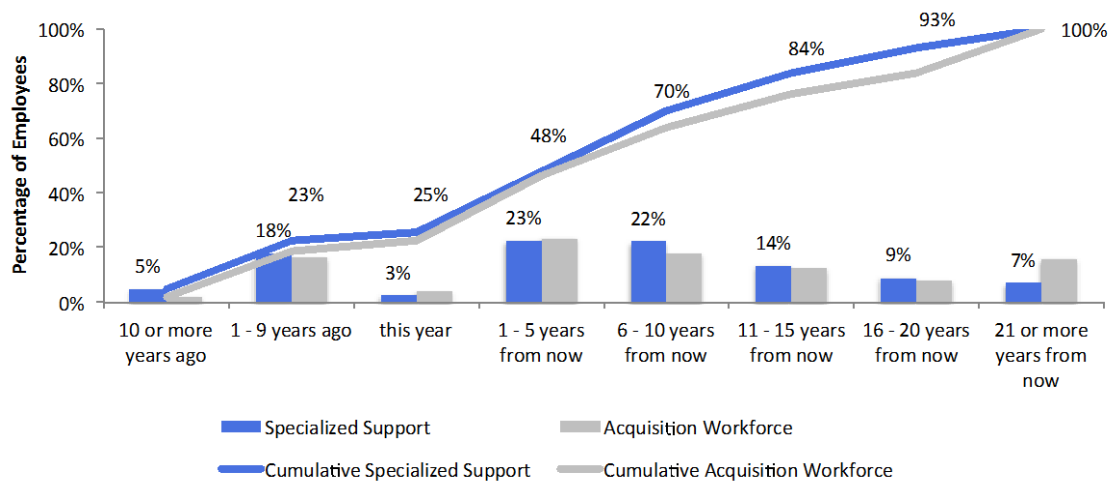
## Retirement Eligibility

Exhibit 7.11.3 shows the retirement eligibility profile for the acquisition employees in the Specialized Support profession. The exhibit shows both annual and cumulative eligibility and compares it to the overall acquisition workforce. Cumulatively, 25 percent of Specialized Support professionals are eligible to retire by the end of this year, versus 22 percent in the overall acquisition workforce.

<sup>19</sup> The three career level categories are: Entry (Student through G Band and General Schedule equivalents); Mid (H Band, I Band, and General Schedule equivalents); Senior (J Band and higher, and General Schedule equivalents).

## Exhibit 7.11.3

### Specialized Support Retirement Eligibility



## Critical Competencies

Specialized Support is not a candidate for a profession-specific competency model due to the varied nature of the work performed by individuals in this category.

## Challenges

- Managing the potentially high attrition from this specialized, highly skilled NAS workforce.

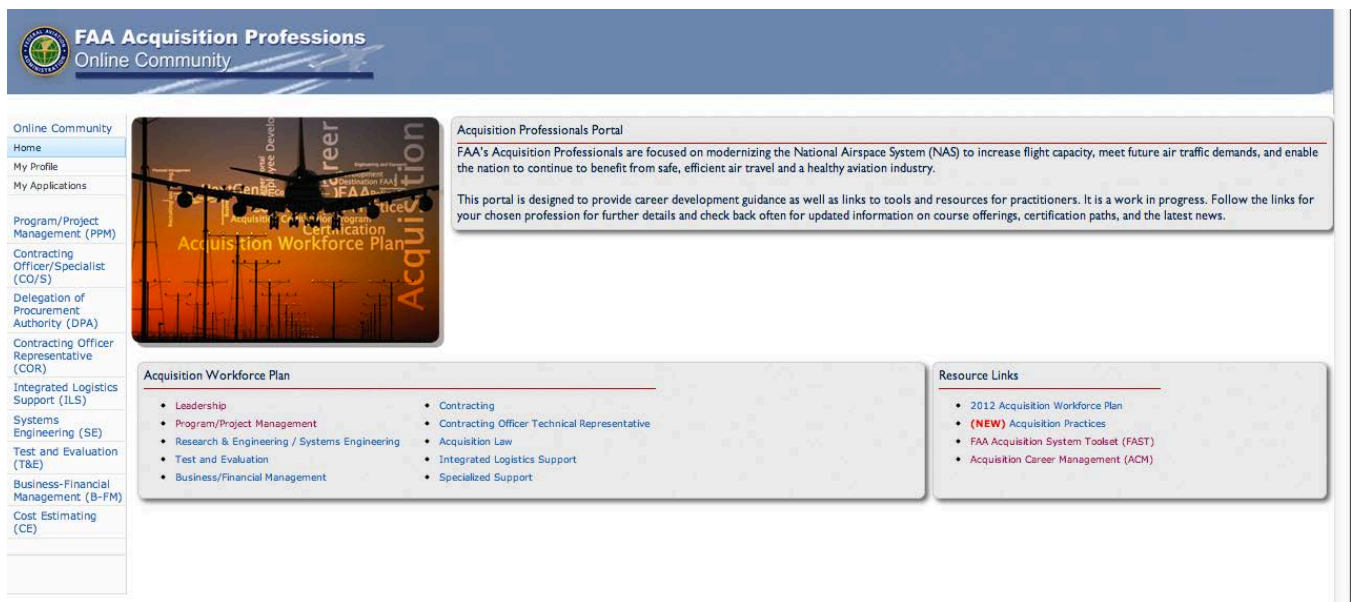
## Planned Initiatives for FY 2016

Initiative	Deliverable	Planned Completion
Review and enhance curriculum	Robust curriculum	Annually

# Appendix

## ACQUISITION WORKFORCE WEBSITE

The Acquisition Workforce website, <https://ksn2.faa.gov/faq/AcquisitionProfessions/Pages/Default.aspx>, provides a common framework for sharing information about FAA's core acquisition professions. Figure A1 below shows the home page, where acquisition professionals can get current information about acquisition issues and opportunities, access their own profile as an acquisition workforce member, and navigate to profession-specific websites.



**Figure A1**

Acquisition Workforce Home Page



Figure A2 shows an example of a profession-specific website. Profession-specific sites provide targeted information and features for the profession. Through this site, for example, Program/Project Management professionals can learn about what other Program Managers are working on, learn more about their professions' competencies and certification requirements (Figure A3), complete an application for certification, and access additional development tools (Figure A4).

**FAA Acquisition Professions Online Community**

**Program / Project Management Community Portal**  
Dedicated to supporting career development efforts of current and aspiring program and project managers

**Online Community**  
Program/Project Management (PPM)  
PPM Home  
Career Development  
Apply for P/PM Certification  
Tools and Resources

**Contracting Officer/Specialist (CO/S)**  
**Delegation of Procurement Authority (DPA)**  
**Contracting Officer Representative (COR)**  
**Integrated Logistics Support (ILS)**  
**Systems Engineering (SE)**  
**Test and Evaluation (T&E)**  
**Business-Financial Management (B-FM)**  
**Cost Estimating (CE)**

**P/PM News**

- New!** DoD hosts bi-weekly System Engineering webinars that would count toward your professional CLPs. The April 11 webinar topic is Mission Architecture: The Key to Successful Pre-Milestone A Systems Engineering facilitated by Michael Stokes of Raytheon. [Click here](#) for the complete 2013 schedule including planned webinars and presentation archives. [Download webinar access instructions here.](#)
- You have many training options to support your career development. [Download the schedule of Acquisition Training available through eLMS](#) or explore the varied classroom and online courses in FAITAS each week. As an example, FAI is offering a boot camp April 9-10 on how to recruit and build high-performing acquisition teams. [Register](#) under course number FCL-A-0008, 13A.
- New!** AMS Lifecycle (FAA30010002) is a streamlined 3 day course that replaces FAMS. It also satisfies the training requirement for Introduction to AMS (FAA60004400). [Explore the revised training requirements for P/PM certification here.](#)
- P/PM Career Guide has been updated to include streamlined competencies and new performance indicators and updated training courses
- Encourage all FAA contractors who have an FAA email address to explore training opportunities in eLMS. Additional information is available at the contractor eLMS resource center (<https://elms.faa.gov/contractors.html>) or in the eLMS Contractor Job Aid.

**Employee Spotlight**

"As a PM, you will no longer be the technical expert you used to be – you'll have to rely on other members of your team for this expertise. Work on your so-called "softskills" – communicating and influencing people."


**Ahmad Usmani**

Read More About Ahmad Usmani...

- Explore a Day in the Life of a Program Manager...


**Apply For Certification**  
Learn about the process by reading

**Figure A2**  
P/PM Home Page


**FAA Acquisition Professions**  
 Online Community

Online Community  
 Program/Project Management (PPM)  
 PPM Home  
**Career Development**  
 Apply for P/PM Certification  
 Tools and Resources  
 Contracting Officer/Specialist (CO/S)  
 Delegation of Procurement Authority (DPA)  
 Contracting Officer Representative (COR)  
 Integrated Logistics Support (ILS)  
 Systems Engineering (SE)  
 Test and Evaluation (T&E)  
 Business-Financial Management (B-FM)  
 Cost Estimating (CE)

**Competencies**
Career Planning
 Individual Development Plan
 Certification



**COMPETENCIES**  
 The Skills, Knowledge, and Attributes Needed to Perform the P/PM Role at the FAA

**Benefits of Competencies**  
 The competencies and related performance indicators, listed alphabetically below, are general descriptions of the skills, knowledge, and attributes needed to perform the P/PM role at the FAA. The performance indicators describe the knowledge or actions required to successfully demonstrate each competency at three levels: basic, intermediate, and advanced. Competencies and performance indicators play an important role as you work with your manager to plan for development.


For Managers, Competencies:	For Employees, Competencies:
Identify performance criteria to improve the accuracy and ease of the hiring and selection process	Identify the criteria required to be successful in their role
Clarify standards of excellence for easier communication of performance expectations to direct reports	Provide for objective assessment of strengths and target areas for development
Provide a foundation for dialogue to occur between the manager and employee about performance, development, and career-related issues	Provide the foundation for development tools and methods for enhancing skills

**Understand and Apply the Competencies**  
 Competencies and performance indicators (PIs) form the foundation for all P/PM professional development activities from certification through training and developmental assignments. P/PM competencies are descriptions of the technical and non-technical skills, knowledge, and attributes needed to perform the P/PM role at the FAA. They include both technical and nontechnical competencies. Technical competencies and PIs are specific to the role of the P/PM. Non-technical competencies and PIs are the skills and behaviors that contribute to superior performance.

Technical Competency Definitions (Click to Expand)


Non-Technical Competency Definitions (Click to Expand)

**Figure A3**  
P/PM Competencies


**FAA Acquisition Professions**  
 Online Community

Online Community  
 Program/Project Management (PPM)  
 PPM Home  
 Career Development  
 Apply for P/PM Certification  
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 Contracting Officer Representative (COR)  
 Integrated Logistics Support (ILS)  
 Systems Engineering (SE)  
 Test and Evaluation (T&E)  
 Business-Financial Management (B-FM)  
 Cost Estimating (CE)

**Acquisition Practices**
Competency Based Tools
 Resources



**ACQUISITION PRACTICES**  
 Resources for Practical Guidance in AMS Policy Implementation

**Access Acquisition Practices Toolkits**  
 Visit the online resource center for practical guidance in managing system acquisition programs. Two Acquisition Practices Toolkits offer guidance on implementing AMS policy related to program management:

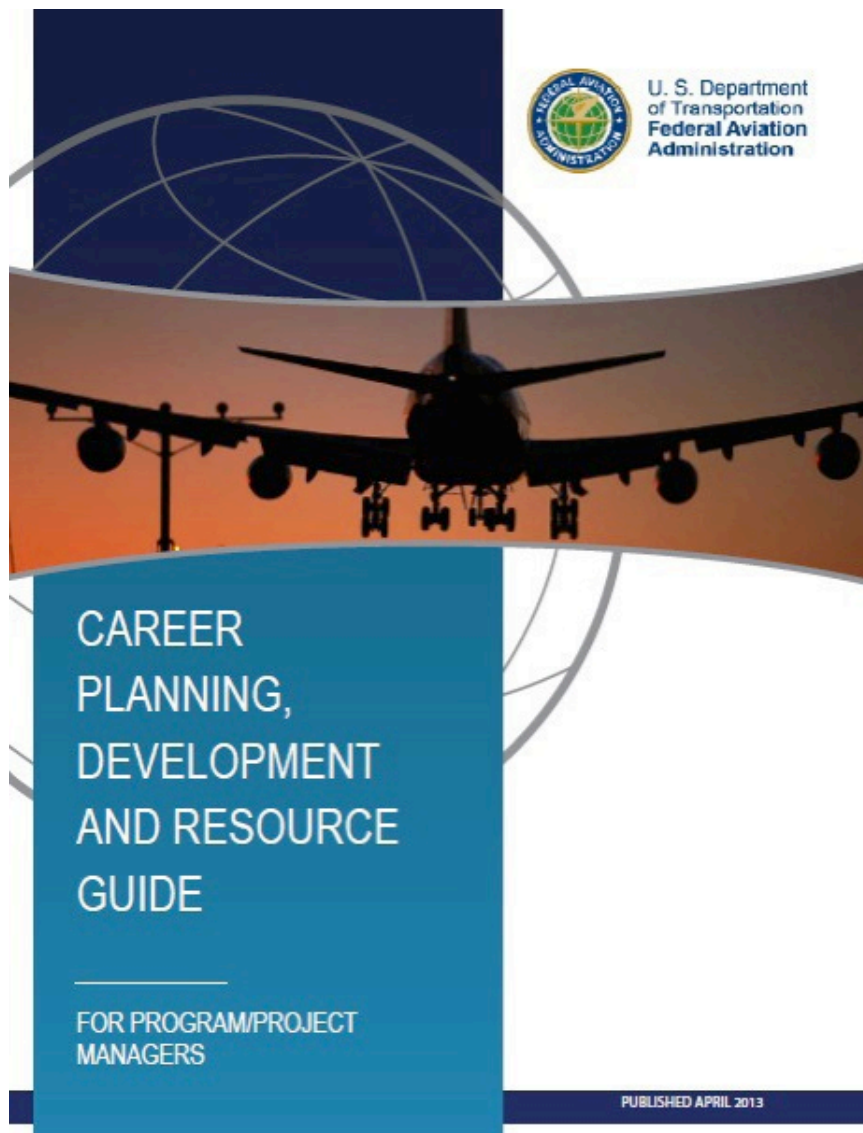
- Discipline Toolkits offer guidance for all activities related to each functional area such as Contractor Management, Requirements Management, Risk Management, Measurement and Analysis, Contractor Management, Quality Assurance, and Validation and Verification.
- AMS Phase-Based Toolkits provide an overview of all the activities, reviews and templates to complete each phase of the AMS life-cycle.

**Get Answers to Your Questions**

- Contact ACM for more information

**Figure A4**  
P/PM Tools and Resources

Career Planning, Development and Resource Guides, an example of which is shown below in Figures A5, A6 and A7, are important tools for individual professionals and their managers to better understand the competencies and certification programs for their specific profession. The guides also provide suggestions for training and other developmental activities, like mentoring or shadowing more experienced professionals. To support development planning, the guides provide sample Individual Development Plan forms (Figure A8) for employees to use and managers to review and approve. The Career Guide for Managers includes additional tools, like sample vacancy announcements (Figure A9) and competency-based behavioral interview guides.



**Figure A5**  
P/PM Career Guide for Employees



## PROGRAM/PROJECT MANAGER TECHNICAL COMPETENCIES

COMPETENCY	DEFINITION
Benefit-Cost Analysis	<ul style="list-style-type: none"> <li>Knowledge of cost-benefit analysis methods, concepts and processes</li> </ul>
Budget Execution	<ul style="list-style-type: none"> <li>Knowledge of systems and processes for tracking actions affecting the budget</li> </ul>
Contract Administration	<ul style="list-style-type: none"> <li>Knowledge of contract administration methods and techniques</li> </ul>
Contractor Performance Management	<ul style="list-style-type: none"> <li>Knowledge of contractor performance requirements and appropriate remedies</li> </ul>
Cost Estimating	<ul style="list-style-type: none"> <li>Knowledge of the types and methods of cost estimating</li> </ul>
Development of Supportability Requirements	<ul style="list-style-type: none"> <li>Knowledge of performance-based logistic efforts that optimize total system life cycle availability, supportability and reliability/maintainability while minimizing cost, logistic footprint and interoperability</li> </ul>
Earned Value Management (EVM)	<ul style="list-style-type: none"> <li>Knowledge of and skill in applying EVM techniques</li> </ul>
Financial Planning	<ul style="list-style-type: none"> <li>Knowledge of financial planning methods, tools and processes</li> </ul>
Formulation of Financial Programs and Budget	<ul style="list-style-type: none"> <li>Knowledge of established budgeting systems and tools. Knowledge of financial and budget terms and key financial guidance</li> </ul>
Life-Cycle Logistics Strategy Development	<ul style="list-style-type: none"> <li>Knowledge of performance-based logistic efforts that optimize total system life cycle availability, supportability and reliability/maintainability while minimizing cost, logistic footprint and interoperability</li> </ul>
Market Analysis	<ul style="list-style-type: none"> <li>Knowledge of government and non-government sources. Knowledge of the business implications relevant to documenting requirements</li> </ul>

## Figure A6

### P/PM Career Guide – Certification



## PROGRAM/PROJECT MANAGER CERTIFICATION PROGRAM

The complexity, criticality and visibility of our work requires a standard of excellence and ongoing investment in building FAA's talent base. Certification credentials represent excellence in a chosen field. As you invest time and effort in achieving certification, you are enhancing your long-term career growth.

## TARGET AUDIENCE FOR ACQUISITION PROGRAM/PROJECT MANAGEMENT CERTIFICATION:

- Individuals officially designated as a program manager, project manager, or project lead, with authority and responsibility for the management and oversight of Federal Aviation Administration (FAA) major and non-major acquisition programs or projects.
- Individuals participating as a project team member in one or more phases of the acquisition process.

## LEVEL I CERTIFICATION

Level I certification establishes fundamental qualifications in program and project management via training and experience. This level sets the foundation for career progression that includes sole responsibility for managing increasingly complex investments or portfolios.

### EDUCATION

Formal education is not required, however a baccalaureate degree, preferably with a major in engineering, systems management, or business administration, is desired.


### EXPERIENCE

At least two years of acquisition experience or one year of project management experience within the last five years is required. Experience should include, but is not limited to, constructing work breakdown structures; preparing project analysis documents; tailoring acquisition documents to ensure that quality, effective, efficient systems or products are delivered; analyzing and/or developing requirements; monitoring performance; assisting with quality assurance; and budget development.

One year of acquisition experience may be waived for having either a four-year college degree or a Master's degree.

## Figure A7

### P/PM Career Guide – Certification

 <b>INDIVIDUAL DEVELOPMENT PLAN</b> Program/Project Management Level I Certification						
Name	Series/Grade	Position Title	Routing Code	Supervisor	Date	Plan Period

Section I. Career Goals	
Short Term Goal(s) (1 to 2 years)	Long Term Goal(s) (2 to 5 years)

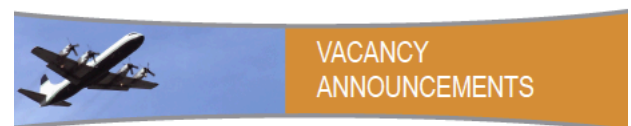
Section II. Individual Development Plan			
A. Certification			
Level I Certification Courses	Location	Date Planned	Date Completed
FAA04202 – Introduction to Acquisition Management System			
FAA05727 – Principles of Federal Appropriations Law			
FAA80004232 – Managing Projects			
FAA04200 – COR/COTR Basic Training or Equivalent			
FAA04207 – Introduction to FAA Risk Management			
FAA04213 – Introduction to Cost Estimating			
FAA04215 – Earned Value Management Basic			
FAA04211 – Key Ingredients of Systems Engineering			
FAI FAC-P/PM 100 – FAC-P/PM Entry Level Capstone Course			
<b>ELECTIVE (Select One)</b>			
FAA04225 – Requirements Analysis and Development Workshop			
FAA44518001 – Introduction to Integrated Logistics (online)			
FAA80004242 – Project Leadership Management and Communications			
FAA80004260 – PM Simulation Workshop (Fundamentals)			

**Figure A8**

P/PM Career Guide – Individual Development Plan (IDP)

**Figure A9**

P/PM Career Guide – Vacancy Announcement Tools



Use the following information to develop vacancy announcements for Program/Project Manager roles:

**GENERAL RESPONSIBILITIES OF A PROGRAM/PROJECT MANAGER**

- Performs technical planning, system integration, verification and validation, cost and risk, and supportability and effectiveness analyses for total systems
- Performs analyses at all levels of total system product to include: concept, design, fabrication, test, installation, operation, maintenance and disposal
- Ensures the logical and systematic conversion of customer or product requirements into total systems solutions that acknowledge technical, schedule, and cost constraints
- Performs functional analysis, timeline analysis, detail trade studies directing, coordinating, and exercising functional authority for schedule planning, organization, budgets via Earned Value, risk management, assembly/integration, and hardware qualification
- Oversees engineering resources to support project

requirements, technical trade studies, peer reviews, formal reviews, preparation of specifications, technical plans, product testing and production support, and proposal preparation

- Ensures that functional managers and other stakeholders are aware of project status and program performance issues. Works closely with engineers from optical, electrical, mechanical, test, software engineering disciplines, customer's technical team, and suppliers
- Manages costs, schedules and technical performance and leads a multi-functional team in achieving contractual objectives
- Focuses on the simultaneous cost / schedule / quality management of the program and on technical performance and customer relations
- Participates in the negotiation of contract and contract changes

For additional information about FAA's Acquisition Workforce Strategy, programs, and initiatives,  
please contact:

Acquisition Career Management Group  
Acquisitions and Business Services  
Office of Finance and Management

Web:

[https://employees.faa.gov/org/staffoffices/afn/acq\\_business/acquisition\\_policy/career\\_mgmt/](https://employees.faa.gov/org/staffoffices/afn/acq_business/acquisition_policy/career_mgmt/)